# CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, May 28, 1908.


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## CONSTRUCTION NEWS.

### PLANS AND SPECIFICATIONS ON FILE.

(* *denotes that this work is advertised in Engineering News.*)

The following Plans (P.) and Specifications (S.) are on file and may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York.

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### RAILWAYS.

(* *denotes that this work is advertised in Engineering News.*)

ALEXANDRIA, LEESVILLE, LUFKIN & WESTERN.—At the first meeting of the Board of Directors held at Leesville, La., on May 15, the company was organized with the following officers: Michael O'Brien, Pres.; Thomas C. Wingate, First Vice-Pres.; J. J. Hicks, Second Vice-Pres.; W. K. Ferguson, Third Vice-Pres.; G. H. Schwitzer, Secy.; J. E. Duff, Treas. D. M. Shollars is Counsel at Leesville and H. H. White is Counsel at Alexandria. This railway, when constructed, will connect Alexandria and Leesville, La., and Lufkin, Tex. Capital stock, $1,000,000. Noted on April 23.

BAINBRIDGE NORTHEASTERN.—Official announcement is made by J. M. Wilkinson, receiver, at Valdosta, Ga., that there is no prospect of any construction in the near future. As noted on March 12, the company's charter calls for a line 70 miles long, traversing the counties of Mitchell, Thomas, Grady and Decatur, and extending through Florida to a point on the Gulf of Mexico. Capital stock, $200,000. The officers are as follows: E. Swindell, Pres.; J. C. McCackill, Vice-Pres.; J. Swindell, Gen. Mgr.; Lee Parker, Supt.; L. H. Tonge, Secy. and Treas.; and Byron Power, Gen. Counsel, all of Bainbridge, Ga. Noted on Dec. 5. Mr. Wilkinson states that the Bainbridge Northeastern Co. is so intimately connected with the affairs of E. Swindell & Co. that the court has placed the railroad in his hands as receiver. Whether Swindell & Co. own the roadbed, rails, ties, right-of-way, etc., or whether the property is owned by the Bainbridge Northeastern, may not be exactly clear, but at any rate the whole property is in the hands of the receiver.

BATAVIA & NORTHERN.—Richard S. Schermerhorn, Ch. Engr. and Gen. Mgr., 183 Prospect Pl., Brooklyn, N. Y., states that the line from Batavia to Oak Orchard Harbor, N. Y., has been surveyed. It is not definitely decided when construction will begin. The line, as located, extends north from Batavia through Elba, Albion and Charlotte to Oak Orchard Harbor on Lake Ontario. Charles H. Wright, Pres.; H. C. Mitchell, Secy., 60 Wall st., New York.

BLYTHEVILLE, LEACHVILLE & SOUTHERN ARKANSAS.—Chartered in Arkansas on May 19 to build a 50-mile railway through parts of Mississippi, Crawford and Poinsett Counties, beginning at Blytheville and extending to Lepanto, on the Frisco System. From Blytheville it extends west to Glencoe. From a point on this line an extension will be made to Big Lake, thence southerly to Lepanto. A branch line is also to be built to Leachville. The company is capitalized at $250,000. Board of Directors: A. C. Lange, W. P. Orr, J. R. Hancock, William Wilms, and R. L. McClelland. The general offices will be located in Little Rock, Ark.

CHARLESTON, PARKERSBURG & WESTERN.—C. P. Peyton, Ch. Engr., Charleston, W. Va., advises us that contracts for building this railroad will not be let this season. It will run from Charleston to Parkersburg, W. Va., a distance of 50 miles, via Sissonsville, Spencer and Palestine. Surveys are partly made and right-of-way partly secured. A. S. Alexander, of Charleston, is Pres. Previously noted.

CHICAGO, BURLINGTON & QUINCY.—The New York "Tribune" on May 26 stated that this company "executed on March 2 a mortgage to the Central Trust Co. and Oliver M. Spencer, trustees, securing an issue of $300,000,000 general mortgage 4 per cent. 50-year bonds, due on March 1, 1958. Of these bonds $16,000,000 are to be issued at this time to reimburse the treasury of the company for expenditures on account of improvements and construction. The $300,000,000 bond issue is believed to be the largest ever made by a railroad company, and is only exceeded by the $304,000,000 collateral trust bond issue of the United States Steel Corporation. The total length of the Burlington is about 9,150 miles, and the new mortgage is understood to be a blanket mortgage, covering the entire system."

DELAWARE, LACKAWANNA & WESTERN.—Bids have been taken by this company, which has completed plans for building a cut-off between Lake Hopatcong, N. J., to Portland, on the Delaware River, about 28 miles. Estimated cost, $16,000,000. The cut-off will reduce the distance and maximum grades between Jersey City and Buffalo. Lincoln Bush is Ch. Engr., Hoboken, N. J.

EXCELSIOR SPRINGS & SUBURBAN.—Incorporated in Missouri last week with $50,000 capital. It is to extend from a junction with the Chicago, Milwaukee & St. Paul Ry., near Excelsior Springs, Mo., to the central portion of that city, with the necessary switches, spurs and side tracks. Henry J. Arnold, of Denver, John E. Lundstrum, of Colorado Springs, Hugh Wilhite and W. P. Southard, of Excelsior Springs, are the incorporators.

GLENVILLE & KANAWHA.—We are officially advised that company will let construction contracts as soon as money can be arranged for this purpose. Line will run from Glenville to Weston, W. Va., 28 miles. Robert L. Ruddell is Gen. Mgr. and Fred Lewis is Ch. Engr., Glenville.

JOPLIN & EASTERN.—This company was incorporated in Missouri on May 22, with $500,000 capital, by Henry Rohwer, Ernest A. Peters and John B. Christensen of St. Louis; R. M. Shepherd and E. D. Nix, of Joplin. The road is to be built from an intersection with the Kansas City Southern Ry., the St. Louis & San Francisco R. R. and the Missouri Pacific Ry. lines in Joplin, Mo., to the western boundary of the State, and will be twelve miles long.

NEW ORLEANS PUBLIC BELT R. R.—We are officially informed that construction of this railroad is practically completed and it is expected to commence operating trains about Aug. 1 from Jefferson Parish line to Montegut St. It will be a double-track railroad, 26 miles in length. Contract was let on Sept. 14, 1907, to the ORLEANS ENGINEERING CO., 715 Macheca St., New Orleans. Mayor Martin Behrman is Pres. of the Public Belt R. R. Commission of New Orleans. W. J. Hardee is Ch. Engr., and Hampton Reynolds, Asst. Engr., Room

21, City Hall. The Commission originally contemplated building 52 miles of road, but up to date only the two main line tracks along the river front have been completed. The total distance of these two main line tracks aggregates 26 miles, including sidings, switches, etc. While the work has been practically completed there yet remain a number of sidings and switches to be constructed, chief among which are the round house or storage shed, which will contain enough tracks to accommodate about 25 cars. In addition to these the Belt Commission will construct a double-track switch in Julia St., from the river front to Commerce St., which is estimated to cost $40,000. This work probably will commence within the next 60 days. The Belt R. R. will ultimately be constructed around the city through the suburbs, connecting with the tracks on the river front, thus completing the original 52 miles originally planned by the Commission. The Belt on the river front probably will be opened for traffic on or about Aug. 1.

REDDING, AFTERTHOUGHT & NORTH-EASTERN.—S. E. Bretherton, Supt., Redding, Cal., informs us that contracts will be let during May and June for building this railway. It will run from Bella Vista to Ingot, Cal., 14 miles. It may be extended from Ingot to Redding, eleven miles. Surveys have been made. Nearly all necessary capital and right-of-way have been obtained. Henry Rickel is Pres. and F. J. Dearborn is Ch. Engr., Ingot.

SALEM, WINONA & SOUTHERN.—Incorporated in Missouri. Company is capitalized at $150,000, is formed for the purpose of acquiring the railroad of the Missouri Lumber & Mining Co. in Shannon County and constructing and operating a standard-gage railroad. The incorporators are: John B. White, Jefferson D. Riddle, William S. McKinney, Frederick C. Broadway and Alfred Hemingway, all of Kansas City, Mo.

TEXAS NORTHERN.—Chartered in Texas, with $50,000 capital stock, to build and maintain a railroad from Groveton, in Trinity County, to be extended in a general northeasterly direction through Trinity and Angelina Counties to Lufkin, a distance of about 36 miles. The principal office of the road will be maintained at Groveton. Its incorporators are William T. Joyce, D. H. Batchelder, R. C. Hitchcock, L. P. Atmar, J. C. Anderson, P. A. McCarthy, W. C. Trout, H. M. Garwood, Edwin B. Parker and C. R. Wharton, of Groveton.

UNION PACIFIC.—The cut-off from South Omaha to Lane, Neb., 11½ miles, has been opened for traffic. A. L. Mahler is Vice-Pres. and Gen. Mgr., Omaha, Neb.

VANCOUVER ISLAND & EASTERN.—Company has applied for a charter. The provisional directors include: T. W. Patterson, T. J. Jones, R. C. Lowe and H. A. Munn, Victoria, B. C.; James Smith, Edmonton, and M. J. Harvey, Toronto. As noted officially on March 12, this railway will be about 1,000 miles long, running from Victoria, B. C., to Seymour Narrows and from Seymour Narrows to Edmonton, Alta., over the original Canadian Pacific Ry. survey. Right-of-way is secured. Capital has not been obtained yet. T. W. Patterson, Victoria, B. C., is Pres.

## ELECTRIC RAILWAYS.

NEW YORK, N. Y.—In the United States Circuit Court on May 20 Judge Lacombe issued an order authorizing Frederick W. Whitridge as receiver of the Third Avenue R. R. Co., 42d St., Manhattanville & St. Nicholas Ave. Ry. Co., the Dry Dock, East Broadway & Battery R. R. Co., and the Union St. Ry. Co., to issue receiver's certificates to an amount not to exceed $2,500,000. For the improvement of property and service of the Third Avenue R. R. Co. the following expenditures will be made: $135,000 for sprinkling and other fire apparatus and their installation at the company's barns; $300,000 for repairs to cars and for purchasing new motors, controllers and other electrical equipment; $436,000 for renewals and repairs to and maintenance of tracks and electrical equipment and paving; $151,000 for alterations and repairs to building at 65th St. and Third Ave.; $106,000 for alterations and repairs to building at 129th St. and Third Ave.; $100,000 for repairs to Bayard St. and 129th St. and 65th St. Subway station; $1,500,000 for the purchase of new cars; $30,000 for repairs to and maintenance of the tracks of the 42d St., Manhattanville & St. Nicholas Ave. Ry. Co.; $4,000 for repairs to a building at 177 Manhattan St.; $10,000 for repairs to and maintenance of tracks of the Dry Dock, East Broadway & Battery R. R. Co.; $225,000 for the erection upon land in Pelham belonging to the Union Ry. Co. of a car barn for storage and repairing of cars; $225,000 for the erection of a new power station at 161st St.; $225,000 for the erection of a new power station upon some suitable site to be determined on by the receiver in the neighborhood of the Kingsbridge plant of the Union Ry. Co.; $250,000 for the completion and construction of proper equipment of a street railway line on the Bronx and Pelham Parkway from Fordham Station to a point beyond the Zoological Gardens and the acquisition of all necessary franchises, permits and right-of-way and property; for taxes, interest, etc.

MANOR, PA.—We are officially informed that the Manor Valley Elec. Ry. Co. has applied for a charter. Company proposes to build from Manor to Export, seven miles. Surveys are made. Right-of-way and capital for building the line are partly secured. H. A. Lauffer is Pres., Manor. Noted on April 23.

PHILADELPHIA, PA.—John L. Clawson, 45 South Second St., Philadelphia, who is receiver of the Atlantic City & Suburban Traction Co. of Pleasantville, N. J., is interested in plant to build a railway to Atlantic City if that city will grant him franchises for trolley lines on Pacific and Arctic Aves.

BEAVER FALLS, PA.—C. J. D. Stroheckler, Pres. of the Beaver Falls & New Castle St. Ry. Co., Zelienople, Pa., advises us that this railway will connect Beaver Falls, New Castle and Ellwood City, and will be 20 miles long.

YORK, PA.—J. H. Keller, Secy., Shrewsbury, advises us that right-of-way is being secured by the Shrewsbury & York Traction Co., which proposes to build an electric railway between Turnpike and York, 14 miles. Survey has been made. D. B. Goodling, Loganville, Pa., is Pres.; S. M. Manifold, York, is Ch. Engr. Noted on March 5.

OAKLAND, MD.—The Youghiogheny Light & Power Co., Oakland, wil build a standard-gage electric railroad to Swallow Falls and then a branch about 30 miles long to Uniontown, Pa.; also a lateral branch from this to Kingwood, about 12 miles; also another branch 14 miles long to connect with the railroad of the Jennings Lumber & Coal Co. A. C. Sturgiss is Pres.; Truman West, Vice-Pres.; P. A. Chisholm, Second Vice-Pres.; James D. Hamill, Treas.; Bowie Johnson, Secy.; H. P. Tasker is Gen. Mgr. Noted on May 14.

FAIRMONT, W. VA.—A special meeting of the stockholders of the Fairmont & Clarksburg Traction Co., whose lines connect these two West Virginia towns, will be held June 10 for the purpose of increasing the capital from $2,000,000 to $5,000,000. It is the intention of this company to connect all the more important towns in eastern West Virginia in an interurban system. S. L. Watson is Pres.; S. B. Miller is Ch. Engr., Fairmont.

ASHTABULA, OHIO.—The Ashtabula Electric St. Ry. Co. will construct its proposed road from Ashtabula to Ashtabula Harbor, 5½ miles, this year. The company proposes to use the overhead trolley system and to operate five cars. No contracts have been awarded. C. E. Wallin is Pres.; E. P. Broden, Vice-Pres.; J. V. Paulson, Secy.; O. Arvidson, Treas.; and C. F. Bretherton, Gen. Mgr.

NEW PHILADELPHIA, OHIO.—The Columbus, Canton & Eastern Transit Co. has been incorporated in Ohio to construct an electric railway through Canal Dover, Coshocton, New Philadelphia, Newcomerstown and Newark, Ohio. Preliminary surveys have been made. Construction probably will be started as soon as financial arrangements are completed. Headquarters, New Philadelphia. Capital stock, $200,000. Incorporators: W. J. Wise, W. W. Snyder, Clyde J. Knisely, Frank J. G. Kuenzli, F. O. Richards, A. W. Reiser and E. S. Rhodes.

XENIA, OHIO.—Construction work on the line of the Cincinnati, Wilmington & Xenia Traction Co. probably will begin soon. It is to be a standard-gage electric railway, 38 miles in length, and will connect Blanchester, Martinsville, Wilmington, Port William and Xenia. Wilmington has been selected as the location for the repair shops. The officers of this company are as follows: John M. Carswell, 206 Wainwright Bldg., St. Louis, Mo., Pres.; K. H. Grantham, Wilmington, Vice-Pres., and J. C. Linton, Wilmington, Secy. and Treas. Noted last week.

COLUMBUS, IND.—We are officially advised that the Columbus, Greensburg & Richmond Traction Co. proposes to build an electric line from Columbus to Richmond, 93 miles. Contracts will not be let until company's bonds are sold. Surveys have been made and right-of-way and franchises are secured. Aug. M. Coon is Pres., Indianapolis. A. K. Hollowell, 1215 State Life Bldg., Indianapolis, is interested.

FRANKFORT, IND.—W. H. Cohee, Vice-Pres. and Gen. Mgr. of the Frankfort, Delphi & Northern Traction Co., Frankfort, advises us that contracts probably will not be let before June 25 for building the 27-mile section between Frankfort and Delphi, Ind. Right-of-way and capital are secured and surveys made. Abe S. Strauss is Pres., Chicago, Ill.; J. Brown is Ch. Engr., Frankfort. As noted on Jan. 2, this company was incorporated in January, 1907. The road will be built from Frankfort, Ind., to Chicago, Ill., by way of Delphi, Monticello, Monon and Hammond, connecting at Frankfort with the Indianapolis & Northern Traction Co.

TERRE HAUTE, IND.—Officers of the St. Louis, Terre Haute & Quincy Traction Co. recently elected are as follows: Edward Yates, Pres., Pittsfield, Ill.; W. C. Fick, Quincy, Ill., Vice-Pres.; F. W. Knollenberg, Quincy, Secy.; S. P. Landeraft, Quincy, Treas. This company, which was incorporated last year to build an electric railway from Terre Haute, Ind., to Quincy, Ill., has purchased the property of the Virden & Taylorville Ry. and the Roodhouse & Virden Traction Co., including right-of-way, which will be used for a portion of the line between Taylorville and Quincy, Ill., as noted on April 9.

MARQUETTE, MICH.—J. W. Barber, Secy. of the Marquette, Negaunee & Ishpeming Interurban Ry. Co., states that this company will let grading contracts this month for the line between Marquette and Negaunee, 15 miles. As noted on May 7, "company is making active plans for beginning construction work. The line will be about 15 miles long Capital, $375,000. L. M. Sigler, Cleveland, Ohio, is Pres.; J. W. Barber, Cleveland, Secy.; The Roberts & Abbott Co., Schofield Bldg., Cleveland, Ohio, is Engr." Charles Cumming is Ch. Engr.

DANVILLE, ILL.—D. C. Johnson, Clinton, Ind., Pres. of the Wabash Traction Co., advises us that construction of this railway at an early date is assured. It will run from Danville, Ill., to Terre Haute, Ind., skirting the west bank of the Wabash River and passing through Clinton, Ind., connecting a chain of towns from Terre Haute to Danville, a distance of 54 miles. Surveys have not been made or right-of-way secured yet. The officers of the company are as follows: D. C. Johnson, Clinton, Pres.; W S. Lewis, Clinton, Vice-Pres.; B. S. Aikman, Newport, Secy., and H. B. Davis, Newport, Treas.

WOOD RIVER, ILL.—The Wood River, East Alton & Bunker Hill Traction Co. has been incorporated in Illinois to build an electric railway between Wood River, East Alton, Bethalto, Moro, Bunker Hill, Gillespie and Litchfield, Ill., about 60 miles. The overhead trolley system will be used. Power for lighting and other purposes will be furnished to cities and towns along the line. Power station and repair shops probably will be located at Bethalto, Ill. Practically all right-of-way and franchises through several towns have been secured. Capital stock, $250,000. Incorporators: J. T. W. Rudesill, Pres.; S. B. Knepper, Secy.; R. M. Smith, Treas., all of East St. Louis, Ill.; and D. R. Maxey, Vice-Pres., Wood River.

OSHKOSH, WIS.—We are officially informed that the Winnebago Traction Co. has taken no definite steps yet toward the construction of the extension of Oshkosh & Omro line to Berlin. J. P. Pulliam is Supt. and E. Gunter is Ch. Engr.

WATERLOO, IOWA.—The Iowa R. R. Co. has started final surveys for its proposed standard-gage electric line, which is to be about 130 miles long. The Iowa R. R. Co. was incorporated on April 13, 1908, with a capital stock of $100,000. It will connect the following cities: Waterloo, Cedar Falls, Fredsville, Dike, Lincoln, Grundy Center, Eldora, Hubbard, Garden City, Story City, Ames, Kelley, Huxley, Ankeny and Des Moines. From Story City a branch will run to Boone, Moingona and Perry. Company will use the overhead trolley system. The power plant and repair shops will be located at Eldora. The railroad company will furnish power for lighting towns along the route. The officers of the company are as follows: Henry S. Osborne, 1402 Ashland Bank, Chicago, Ill., Pres.; Andrew Stevenson, 1211 Association Bldg., Chicago, Ill., First Vice-Pres. and Gen. Mgr.; James F. Hardin, Eldora, Second Vice-Pres. and Treas.; L. W. Harris, Eldora, Secy.; George Welsby Scott, Security Bldg., Chicago, Ill., is Ch. Engr. The incorporation of this company was noted on April 23.

MINNEAPOLIS, MINN.—The Twin Cities & Lake Superior St. Ry. Co. has been incorporated in Wisconsin to build an electric railway from Minneapolis and St. Paul, Minn., to Superior, Wis., 130 miles. The company originally was incorporated under the laws of the State of Maine for the construction of this line under the name of the Twin City & Lake Superior Railway. The Wisconsin articles provide for a road from Sunrise to Peet and from Foxboro to Superior. Capital stock, $7,000,000. Incorporators: E. L. Peet, Gransburg, Wis.; G. B. Haugan, Duluth, Minn.; F. R. Duxberry, St. Paul, Minn.; E. Lewis, Storm Lake, Minn.; Edward Henry, Minneapolis.

OREGON, MO.—Bids are asked by the Oregon Interurban Ry. Co., it is announced, until 6 p. m., June 10, for the construction of 4½ miles of railroad from Oregon to Forest City, Mo. The approximate quantities follow: 60,000 cu. yds. of excavation; 47,000 cu. yds. of embankment; 62,600 ft. of timber and lumber; 2,060 lin. ft. of piling, 16 to 35 ft. long; 405 tons of 56-lb. relay steel rails; 13,000 ties; one steel bridge, 60-ft. span; 4½ miles of tracklaying. Specifications, contract, blank proposals, profile and plans can be seen at office of the company. Bids will be received on any one or more items of above; also on the road complete. The board of directors reserves the right to reject any and all bids. B. F. Morgan, Oregon, Mo., is Pres.; George Custer, Marysville, Mo., Engr. Noted on May 7.

PENDLETON, ORE.—Henry W. Coe, 606 Marquam Bldg., Portland, Ore., who is promoting construction of an electric line between Pendleton and Irrigon, informs us that company is now surveying line and obtaining right-of-way in Umatilla County. Geo. W. Lilly is Ch. Engr. The railway will be about 52 miles long.

SACRAMENTO, CAL.—W. T. Garrett, of San Francisco, has applied to the County Board of Supervisors for a franchise for an electric railway around Oak Park, Gould and Carleton. The proposed line is to be about six miles in length.

OAKLAND, CAL.—A petition has been presented to the Supervisors of Alameda County by Joseph Naphtaly, 1286 O'Farrel St., San Francisco, asking for a franchise for the construction and operation of an electric railway to connect Alameda and Contra Costa Counties by means of the intercounty tunnel through the Berkeley hills.

REDLANDS, CAL.—The Redlands & Yucaipe Elec. Ry. Co., which was organized here last month, will begin work on its line immediately. The railway system will connect Redlands, Yucaipe and Oak Glen and will be about 22 miles in length. The company proposes to erect a power station and repair shop at Redlands. Amusement parks will be operated at Cherry Croft and Oak Glen. The company will also furnish power for lighting. The authorized capital stock is $1,000,000, of which $420,000 has been issued. The officers are: J. M. Neeland, Grosse Bldg., Los Angeles, Cal., Pres.; C. S. Chestnut, Redlands, Cal., Vice-Pres.; C. D. Myers, Redlands, Secy.; M. N. Newmark, Los Angeles, Cal., Treas. W. D. Larrabee, Redlands, is Gen. Mgr. Company has issued $500,000 of 30-year 5% bonds for construction work.

## LIGHT AND POWER PLANTS.

*(* denotes that this work is advertised in Engineering News.)*

NORWALK, CONN.—The contract for installing the proposed electric lighting system has been awarded by the Lighting Committee to W. M. SHEEHAN & CO., for $5,150.

HUDSON, N. Y.—We are officially advised that bids were received on May 12 by the Common Council for lighting the streets and the City Hall building at Hudson for a term of either three or five years, commencing Sept. 15, 1908. The contract has been let to the ALBANY & HUDSON R. R. CO., Stuyvesant, N. Y., for a period of five years at a yearly rate of $81.75 for [illegible] and $22 for incandescent lamps. There [illegible] be 117 arc lamps of 2,000 c.-p. and [illegible] incandescent lamps of 22 c.-p. William [illegible] man is City Clk.

NEW YORK, N. Y.—Bids [illegible] asked by C. B. J. Snyder, Supt. School [illegible] Dept. of Education, until 11 a. m. [illegible] S. for installing electric equipment [illegible] the additions to and alterations in Public [illegible] School No. 64, on the north side of Be[illegible] Ave., Berriman and Atkins Sts., Boro [illegible] Brooklyn.

Bids are asked until 2 p. m. [illegible] June 11, by J. W. Stevenson, Comr. of Bri[illegible] for electrical equipment of the University [illegible] lights bridge.

The following bids were [illegible] on May 25 by C. B. J. Snyder, Supt [illegible] Schools, Dept. of Education, for installing [illegible] electric equipment in new Public School No. [illegible] on 138th and 139th Sts., about 100 [illegible] east of Fifth Ave., Boro. of Manhattan: [illegible] Comstock Co., 114 Liberty St., $18,000; [illegible] Frederick Jackson (Inc.), 592 Columbus [illegible] $16,900; Commercial Construction Co., [illegible] East 28th St., $18,315; Peet & Powers, [illegible] 34th St., $17,639; Griffin & Co., 116 N[illegible] St., $17,327; Ries & O'Donovan, 1123 Broadway, $16,920; Cowden & DeYoung, [illegible] Broadway, $18,490; E. J. Duggan, 1133 Broadway, $21,952; Brown & McClure, 35 West 21st St., $18,110.

NEWARK, N. J.—The Finance Committee of the Board of Freeholders has appropriated $10,000 for installing a larger electric light and power-plant in the penitentiary. The equipment will consist of 150-HP. boiler, an 80-HP. engine and generator. An appropriation of $26,500 for installing an electric plant at the court-house was requested, but was deferred for action later.

PITTSBURG, PA.—Bids probably will be received about June 11 for the construction of a power-house for the Department of Charities and Correction; probable cost, $100,000. John P. Brennan is Asst. Supt. of Bureau of Bldg. Inspection, 431 Sixth Ave.

YORKHAVEN, PA.—Plans are contemplated by the Yorkhaven Water & Power Co. for improvements to its plant, which will increase the output of the plant at Yorkhaven from 10,000 to 20,000 HP. The plans call for construction of an addition to the power house 280 ft. in length, ten General Electric generators and 20 water wheels, manufactured by the Poole Engineering & Machine Co., of Baltimore, Md. An electric crusher will be installed at the quarries. The company also proposes to extend its high-tension transmission lines to Lancaster and other cities in the lower part of Lancaster County, and to Spring Grove and Hanover. E. F. Baker is Gen. Mgr.

PARKSVILLE, S. C.—The Twin City Power Co. contemplates construction of a power plant on the Savannah River near Parksville.

POPLARVILLE, MISS.—About $10,000 will be expended for improvements at the electric light plant and water-works. H. W. Thomas, of Poplarville, is Engr.; J. W. Ford is Mayor.

CARROLLTON, MISS.—The Board of Aldermen has decided to rebuild the Carrollton electric plant. The Carrollton Electric Co. will dispose of all the fire-damaged machinery and install new machinery throughout. It expects to be running in 60 days. B. F. Roach is Mgr.

LEWISBURG, OHIO.—Bids are asked until July 1 for constructing electric light and water systems here, to cost $26,000. The plant will be owned by the municipality and will be operated by gasoline. Harry J. McDargh, Dayton, Ohio, is Engr.

COLUMBUS, IND.—We are officially advised that improvements are contemplated by the Central Indiana Lighting Co. during the summer, which include constructing a power plant, partially rebuilding the street car lines and extending the electric light service. The company also proposes to furnish steam heat to local consumers. New street cars will be purchased. H. D. Larrabee is Mgr.

INDIANAPOLIS, IND.—The Citizens Gas Co. has purchased a site in this city for its proposed artificial gas plant. J. D. Forrest is Secy.; George Summers is Gen. Supt.

GENESEO, ILL.—The CONCRETE ENGINEERING CO., of Martins Ferry, Ohio, has secured contract for erecting a reinforced concrete power plant for the Geneseo Electric Light Co., of Geneseo. Alexander Mark is Mgr.

JUNEAU, WIS.—We are officially advised that the city will construct an electric plant, to be operated by gasoline engine. The city will purchase a 25-HP. engine and a 300-gallon triplex pump. A power-house will be erected. W. G. Kirchoffer, Madison, Wis., is Engr.

WAUPUN, WIS.—The State Board of Control has awarded the contract for the power plant for the State prison to the RATHBUN-JONES ENGINEERING CO., of Toledo, Ohio, for $25,600. H. C. Kock & Son, Wells Bldg., Milwaukee, Wis., are Archs.

SIOUX CITY, IOWA.—All bids opened on May 11 by E. E. Hosmer, County Auditor, for constructing a pumping and power plant, including machinery; also for repairs on the hospital building and for electric wiring of the various buildings at the County Poor Farm, have been rejected. G. W. Burkhead, Iowa Bldg., Sioux City, is Arch.

MINNEAPOLIS, MINN.—The Minneapolis Gas Light Co. is contemplating erecting a plant in northeast Minneapolis, to provide facilities for lighting that section of the city. Plans for this improvement are not fully developed. F. C. Shepard is Supt.

ST. CLOUD, MINN.—The Public Service Co. will construct a power-house to have 1,000-HP. capacity. The building will be 28 x 97 ft., of brick and reinforced concrete. E. E. Clark, St. Cloud, is Supt.

BRAINERD, MINN.—We are officially advised that this city will construct an electric power plant and water-works. Plans and specifications are about complete. H. J. Spencer is City Clerk. Plans have been prepared by O. Claussen, St. Paul, Minn.

KIOWA, KAN.—We are officially advised that plans have been prepared by Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., for a municipal electric light plant to cost $12,000, combined with a water plant to cost $40,000. Plans and specifications are being prepared and bids will be received in about 60 days. The system will be operated by steam. Noted on April 30.

SEWARD, NEB.—Bids are asked until June 3 at the office of John Curry, City Clerk, for furnishing material and apparatus for an addition to the electric light system, as follows: Brick addition, foundation for machinery; Corliss engine; generator exciter and switchboard. John Martz is Engr., Seward.

JEFFERSON BARRACKS, MO.—Bids are asked until 11 a. m., June 15, by Capt. O. W. Bell, Constr. Q. M., for constructing a complete electric lighting system, consisting of the following items: Wiring all buildings; constructing pole lines, generating station building, steel stack; furnishing electric fixtures, transformers and apparatus; furnishing and installing boilers, engines, elevator, pumps and generators. Also the alternate proposal to furnish electric current for lighting will be received.

LITTLE ROCK, ARK.—The Little Rock & Hot Springs Electric Ry. Co. is having plans prepared for a power-house for its proposed road. Richard H. Phillips, Security Bldg., St. Louis, Mo., is Consult. Engr.; C. J. Kramer, 219 Main St., Little Rock, is Pres.

OKLAHOMA CITY, OKLA.—The Oklahoma City, El Reno & Shawnee Rapid Transit Ry. Co., Charles A. Huber, Oklahoma City, Pres., will build five power plants. There will be one or two power plants and car barn at Oklahoma City.

*SPOKANE, WASH.—Bids are asked until 3 p. m., June 23, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the installation of a conduit and electric wiring system in the U. S. post-office, court-house and custom-house at Spokane.

SEATTLE, WASH.—The Board of Regents of the University of Washington has announced to contractors desiring to bid on the proposed new power plant that plans and specifications may be found at offices of Howard & Galloway, Administration Bldg., Alaska-Yukon-Pacific Exposition Grounds, Seattle, and at 604 Mission St., San Francisco, Cal.

CASHMERE, WASH.—The Valley Power Co. will furnish power to light the city and to pump water for $40 per HP. About two miles of pipe will be laid, 6,000 ft. being 6-in. pipe and the balance 3 and 4-in.

CHEMAWA, ORE.—Bids are asked by the Commissioner of Indian Affairs, Washington, D. C., until 2 p. m., June 19, for construction of smokestack and extension to power-house and for installing boiler at the Salem School, Chemawa. E. L. Chalcraft is Supt. C. F. Larrabee is Acting Comr.

BERKELEY, CAL.—The Pacific Gas & Electric Co., of San Francisco, has applied for a permit to construct a sub-station, the cost of which is estimated at $12,000. John A. Britton, San Francisco, is Gen. Mgr.

CHARLOTTETOWN, P. E. I.—Bids are asked by D. Pottinger, Gen. Mgr., Prince Edward Island Ry., Moncton, N. B., until June 4, for construction and erection of a brick power-house and chimney at Charlottetown.

MONTREAL, QUE.—The Saraguay Electric & Water Co. has been formed for the purpose of taking over the property and holding of the Saraguay Electric Light & Power Co. A bill has passed the Quebec Legislature granting the new company extensive powers. The territory of the new company embraces the entire Island of Montreal, including the City of Montreal, the Island of Bizard, and the counties of Two Mountains, Laval and Terrebone. The company is contemplating increasing its output during the present year. Its present plant is located in Cartierville. The company is capitalized at $3,000,000, and the directors are W. M. Ramsay, H. Lamporte, E. Champagne, Gaspard de Serres, 97 St. James St., and Charles Brandeis, all of Montreal.

PRESTON, ONT.—This town has signed with the HYDRO-ELECTRIC POWER COMMISSION, a contract for the supply of electric power from Niagara Falls. The town is to get 600 HP. at $23 per HP. Of this quantity the electric light plant will take over 200 HP. Hon. Adam Beck is Chn. of Comn., Toronto.

WOODSTOCK, ONT.—The contract between the city and HYDRO-ELECTRIC POWER COMMISSION has been adopted, and the Mayor and Clerk were authorized to sign it. The contract calls for the delivery of 1,200 HP. by December, 1909, and it was estimated that the city may supply power for running the municipal water-works and electric light departments, and will sell the remainder to local manufacturers. Hon. Adam Beck is Chn., Toronto.

TORONTO, ONT.—The City Council has authorized contract between the city and the HYDRO-ELECTRIC POWER COMMISSION for 10,000 HP. at $18.10 per HP. The city's share of the cost of the transmission line from Niagara Falls will be $828,080. R. T. Coady is City Clk.

We are officially advised that construction work proposed by the Government through the Hydro-Electric Power Commission should the various municipalities sign contracts for power will consist of about 290 miles of transmission line, erection of step-up transformer stations and switching stations, also step-down transformer stations for the various municipalities. The system will be 110,000 volts. Hon. Adam Beck is Chn. of Comn.

PORT ARTHUR, ONT.—C. B. Smith, Consult. Engr., Toronto, will prepare plans for the development of 10,000 HP. at Dog Lake Falls and submit same to the Council.

BRANDON, MAN.—The International Lighting & Heating Co. will erect three brick buildings for its gas plant.

## BRIDGES.

(* *denotes that this work is advertised in Engineering News.*)

CLAREMONT, N. H.—DOUGLAS & VARNUM, Woodsville, N. H., have been awarded the contract for the construction of the substructure of a bridge across the Connecticut River between West Claremont and Weathersfield, at $8,000.

THE UNITED CONSTRUCTION CO., 467 Broadway, Albany, N. Y., secured the contract for the superstructure at $21,804.

NEW YORK, N. Y.—Bids are asked until 2 p. m., June 11, by J. W. Stevenson, Comr. of Bridges, for furnishing and delivering bronze grills, castings, tubing and brass expansion screws and plates to the Williamsburg Bridge.

*WESTFIELD, N. Y.—Plans and specifications for the construction of a reinforced-concrete viaduct over Chautauqua Creek in West Main St., for the Buffalo & Lake Erie Traction Co., are on file at the office of Engineering News, New York. Bids are asked until June 10. The Western New York Construction Co., Brisbane Bldg., Buffalo, N. Y., are Engrs. Noted last week under Buffalo, N. Y.

JERSEY CITY, N. J.—Bids are asked until 4 p. m., June 4, by the Board of Chosen Freeholders of Hudson County for the construction of a highway bridge over the Morris Canal at Ave. C, between Jersey City and Bayonne, N. J.

PHILADELPHIA, PA.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of bridges under Schedule A. Bids are asked until June 3. George R. Stearns is Dir. Pub. Wks.

*WASHINGTON, PA.—Bids are asked until June 5 by Joseph Hunter, State Highway Comr., Harrisburg, for constructing a reinforced concrete viaduct over Ten Mile Run Branch, Pennsylvania R. R., on the National Pike, in Washington County.

FRANKLIN, PA.—Bids are asked until 1 p. m., June 9, by the Commissioners of Venango County, at Franklin, for the erection of a bridge across Lower Two-Mile Run, where the Victory Road crosses said stream into Cranberry Township, and upon the site of the present bridge (the work to include the removal of the old structure). The bridge shall consist of one span of 30 ft. clear between abutments, with necessary roadway of 16 ft., and the necessary approaches thereto.

FRANKLIN, PA.—Bids are asked until noon, June 9, by the County Commissioners, for constructing a bridge in Scrubgrass Township.

SUMMIT (Spartanburg post-office), PA.—Bids are asked until 2 p. m., June 1, by L. C. Schuwerh, Town Clk., for the construction of a concrete arch bridge in Summit Township.

ATLANTA, GA.—GEORGE B. HINMAN, Austell Bldg., Atlanta, has contract to build a $28,000 ferro-concrete bridge across Peachtree Creek. A. F. Walker is Arch., and the Solomon Norcross Co. is Consult. Engr., both of Atlanta.

ELYRIA, OHIO.—Bids are asked by the Board of County Commissioners of Lorain County, Ohio, until 1 p. m., June 8, at the Court House, Elyria, Ohio, for the construction of stone masonry for the sub-structure of the Garfield bridge over Black River and on the North Ridge Road, Sheffield Township, Ohio. Charles Chandler is Clerk.

LIMA, OHIO.—Bids are asked until June 2 by the Board County Commissioners at Lima, for constructing the long steel bridge across Ottawa River, Germantown; also concrete or stone abutments for said bridge. G. W. Johnson is Chn.

ST. CLAIRSVILLE, OHIO.—Bids are asked until June 15 by A. W. Beatty, County Audr., for constructing the stone or concrete substructure of Provident Bridge, Patton Bridge, Mead Bridge, Water-Works Bridge and Barton Bridge No. 1; also the concrete or stone substructure and steel superstructure of the Lucas Bridge or the stone substructure and steel superstructure of the Walker Bridge, floor in each case to be of concrete.

FORT WAYNE, IND.—Following bids were received on May 9 by the County Commissioners for constructing a 200-ft. span bridge over the St. Mary's River at Clinton St. On reinforced concrete construction, including abutments: National Bridge Co., Indianapolis, Ind., $26,750; Central States Bridge Co., $27,500; on steel superstructure: Wynkoop & McGormerly Co., Toledo, Ohio, $22,471; Penn Bridge Co., Beaver Falls, Pa., $24,000; Central States Bridge Co., $19,445; Elkhart Bridge Co., $19,477; Lafayette Engineering Co., $18,543; Attica Bridge Co., $19,854; Indiana Bridge Co., $18,788.

KENTLAND, IND.—Bids are asked until noon, June 1, by the County Commissioners, for the construction of five concrete bridges and abutments. Lewis S. Alter is Engr.

LEBANON, IND.—Bids are asked until June 1 by the County Commissioners for the construction of eight bridges.

NEWPORT, IND.—Bids are asked until 10 a. m., June 1, for the construction of a bridge and abutments.

SOUTH BEND, IND.—A. J. Hammond, City Engr., is preparing plans for the construction of an ornamental bridge at Leeper Park.

SALEM, IND.—Bids are asked until 1.30 p. m., June 1, by S. G. Ellis, County Audr., for the construction of two steel bridges.

MARION, IND.—Commissioners of Grant County will soon ask for bids for the reconstruction of the McFeely Bridge over the Mississinewa River, east of the city.

SOUTH BEND, IND.—We are officially advised that CATON & OLMSTED, Galesburg, Ill., have been awarded the contract by the County Commissioners of St. Joseph County for the construction of one 14-ft. concrete arch, one 36-ft. steel bridge, and one wing wall to a 25-ft. arch.

IONIA, MICH.—Bids are asked until 10 a. m., May 29, by the County Clk., for the removal of one wrecked steel span, and an old abutment of bridge; for the reconstruction of one new concrete abutment; and the construction and erection complete of one new steel span, with a concrete floor.

CHICAGO, ILL.—Bids are asked by I. J. Bryan, Clk. Sanitary District of Chicago, American Trust Bldg., Chicago, until noon, June 10, for the fabrication and delivery of all metal work for the superstructures of twelve steel highway bridges across the north shore channel of the Sanitary District of Chicago, in the Village of Wilmette, in the city of Evanston and in the Township of Niles of the city of Chicago.

TOPEKA, KAN.—The city contemplates having a concrete bridge constructed across Shungonunga Creek at Lincoln St. Estimated cost, about $4,000.

COLUMBUS, MONT.—The contract for constructing a bridge over Yellowstone River at Columbus has been awarded to the SECURITY BRIDGE CO., of Minneapolis, Minn., for $19,750.

MANDAN, N. DAK.—Bids are asked until June 1 by the Board County Commissioners, for constructing three bridges, complete, including approaches. Bidder to furnish plans and specifications on both steel and combination bridges. H. J. Tavis is County Audr.

TULSA, OKLA.—The County Commissioners have awarded contract to THE CANTON BRIDGE CO., Canton, Ohio, to construct 17 steel bridges for $19,145. The bridges will range from 30 to 190 ft.

ARDMORE, OKLA.—Bids are asked until June 1 by the Commissioners of Carter County, Ardmore, for construction of two steel bridges across Caddo Creek, near Ardmore. Also one bridge over Whiteleg Creek. William B. Frame is County Clerk.

DENVER, COLO.—The Colorado & Southern Ry. Co., contemplates expending $800,000 for the construction of new bridges in Colorado and Texas, and in other improvements. H. W. Cowan, Denver, Colo., is Ch. Engr.

SPOKANE, WASH.—Bids are asked by the Board Public Works until June 10 for furnishing material and constructing at Sprague Ave., either of the following: Steel girder viaduct supported on tower bents, reinforced concrete viaduct; reinforced concrete retaining walls, with earth or rock fill; dry retaining walls, with rock fill.

WOODLAND, CAL.—The County Supervisor has been authorized to have four bridges constructed on the road between Woodland and the Nelson bridge.

SANTA BARBARA, CAL.—Bids are asked until 10 a. m., June 1, by C. A. Hunt, County Clk., for the construction of a bridge over the Santa Maria River in the Fifth Road District.

WILLOW, CAL.—The Boards of County Commissioners of Glenn and Butte Counties awarded the contract for the construction of the Gianella Bridge to COTTON BROS., of Oakland, Cal., at $149,880. List of bidders noted last week.

YREKA, CAL.—Bids are asked until noon, July 7, by W. J. Neilon County Clerk, for construction of a 220-ft. span steel bridge over Klamath River, near Sciad, about twelve miles below Scott Bar, in Scott River Road District. Also for 100-ft. span steel bridge over Salmon River at Sawyers Bar, Etna Road District.

OGDEN, UTAH.—We are officially advised that the following bids were received on May 11 for the construction of a reinforced concrete arch of 65 ft. span across the Ogden River as follows: Jorgensen Bros., 420 Kearney St., San Francisco, Cal., $7,550; Midland Bridge Co., Box 1055, Salt Lake City, Utah, $5,875; M. F. Levy Construction Co., Symes Bldg., Denver, Colo., $5,085; Pueblo Bridge Co., Pueblo, Colo., $4,979; William Doyle, 3232 Washington Ave., Ogden, Utah, $4,742. A. F. Parker is City Engr.

OTTAWA, ONT.—Bids are asked by the Commissioners of the Transcontinental Railway, Ottawa, until noon, June 9, for the construction and erection of the steel superstructures and floor system (with ties and guard rails complete) required for bridges at the points named below in District "A": Cannaan River, March 1, 1909; Salmon River, March 1, 1909; Little Salmon River Viaduct, May 1, 1909; Four Mile Brook, May 1, 1909; Grand River, May 1, 1909; Sigas River, May 1, 1909; Quisibis River, Oct. 1, 1908; Green River, Oct. 1, 1908; Iroquois River, Oct. 1, 1908; Madawaska River, Oct. 1, 1908; Baker Brook, May 1, 1909. P. E. Ryon is Secy.

## BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—The Johns Hopkins Hospital Trustees will erect at the corner of South and Water Sts. a 5-story brick and reinforced concrete office building, which will cost $70,000. It will be 108.6 × 64 ft. Baldwin & Pennington are Archs.

SPRINGFIELD, MASS.—Estimates are invited until June 15 to construct a library to cost $300,000. The structure will be 220 × 86 ft., constructed of granite, marble and terra cotta and will have two stories and basement. It will have a fireproof interior and a marble exterior. Edward L. Tilton, 32 Broadway, New York, N. Y., is Arch.; H. C. Wellman is Librarian, Springfield. We are officially advised that separate estimates will be taken for each branch of construction as well as for the general contract.

HARTFORD, CONN.—The State Armory Commission has awarded the contract for the new State armory at Meriden, Conn., to the H. WALES LINES CO., 134 State St., Meriden. The armory is to cost approximately $90,000.

BUFFALO, N. Y.—Bids were received as follows May 21 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a Marine Hospital building at Buffalo, N. Y.: Metz Bros., 334 Landon St., Buffalo, N. Y., $88,000; Durolithic Co., Buffalo, $84,354; John G. Unkefer & Co., Minerva, Ohio, $93,215; William R. Compton Realty & Building Co., Elmira, N. Y., $86,000; Mosier & Summer, Main and Kensington Sts., Buffalo, N. Y., $85,788.

GENEVA, N. Y.—We are officially advised that SWALLOW & HOWES, 500 Fifth Ave., New York, were awarded the contract for the City Hall at Geneva, N. Y., by the Common Council at a meeting held May 19, 1908. This is to be a fireproof building and to cost $128,715.

NEW YORK, N. Y.—Neville & Bagge, Archs., 217 West 125th St., advise us that the Darrow Realty Co., 47th St. and North River, is taking estimates for a 6-story brick and stone apartment house, 50 × 131.8 ft., to be built on Manhattan St., west of Broadway. Cost, $73,000.

Designs for the county penitentiary to be erected on Riker's Island, which the city will erect at a cost of $4,000,000, have been approved by John V. Coggey, Comr. of Dept. of Correction. The designs were made by Trowbridge & Livingston, 424 Fifth Ave., New York.

The New York Central & Hudson River R. R. Co. will erect a 7-story station and office building, 71.8 × 300 ft., at Depew Pl. Estimated cost, $400,000.

We are officially informed that the TURNER CONSTRUCTION CO., 11 Broadway, New York, has been awarded the general contract for constructing a warehouse for Frederick Loeser & Co., of Brooklyn, at Schefmerhorn and Livingston Sts., Brooklyn. This building will be 170 × 140 ft., eight stories high, with basement and sub-basement, as well as roof and pent houses. Reinforced concrete will be used throughout, excepting the Livingston St. front, which will be brick with terra cotta trim. Work will be begun at once. William Higginson, 13 Park Row, is Arch.

NEW YORK, N. Y.—We are officially advised that Henry T. Bulman, Fort Washington Ave. and 162d St., will take estimates at once for a 6-story apartment house to be erected at 162d St. and Broadway, at a cost of $175,000. It will be of brick and stone construction, 97.7 × 90 ft. Schwartz & Gross, 347 Fifth Ave., are Archs.

It has been decided to proceed with construction of an 8-story building to be erected by the Knickerbocker Trust Co., at Broadway and Exchange Pl. The building is to be constructed to provide for twelve additional stories. The GEORGE A. FULLER CONSTRUCTION CO., Flatiron Bldg., has the general contract. McKim, Mead & White, 160 Fifth Ave., are Archs.

NEW YORK, N. Y.—Bids are asked until 11 a. m., June 8, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for installing heating and ventilating apparatus for additions to and alterations in Public School No. 75, on the corner of Evergreen Ave. and Grove St., Boro. of Brooklyn; and in Public School No. 99, on Coney Island Road and Elm Ave., Boro. of Brooklyn. Also for the general construction, etc., of new Public School No. 163, on the south side of Benson Ave., between Bay 14th St. and 17th Ave., Boro. of Brooklyn; for new fireproof main stairs at Public School No. 26, 124 West 30th St. and Public School No. 47, 225 East 23d St.; also at Washington Irving High School, 60 West 13th St., Boro. of Manhattan; for the general construction, etc., of two additional stories to Public School No. 132, on the east side of Wadsworth Ave., between West 182d and 183d Sts., Boro. of Manhattan.

The Island Realty Co., 111 Broadway, has had plans drawn for a 20-story building at 69 Wall St., running through to 89 and 91 Beaver St. It has a frontage of 36.7 ft. in Wall St. and 55.1 ft. in Beaver St., and its greatest depth is 70 ft.

*ELLIS ISLAND (New York post-office), N. Y.—Bids are asked by Robert Watchorn, Comr. of Immigration, Ellis Island, New York Harbor, until 2.20 p. m., May 29, for mechanical equipment in baggage and dormitory building, at U. S. Immigrant Station, Ellis Island.

PORT WASHINGTON (L. I.), N. Y.—Plans have been completed by R. E. Dunisberre and F. T. Cornell, Archs., 125 East 23d St., New York, for a 3-story high school building for the Board of Education. Cost, $75,000.

*WAMPSVILLE, N. Y.—Bids are asked until 1 p. m., June 11, by the Board of Supervisors of Madison County, care of E. Leland Hunt, Oneida, N. Y., for erecting a court-house and a jail building at Wampsville. J. Riely Gordon, 402 Fifth Ave., New York, and William J. Beardsley, are Archs.; J. A. Loyster is Chn., Cazenovia, N. Y. Plans, etc., are on file at the office of E. Leland Hunt.

*FORT HANCOCK (Sandy Hook post-office), N. J.—Bids are asked by the Commanding Officer, Sandy Hook Proving Ground, until 3 p. m., June 25, for erecting an Ordnance Barracks.

LONG BRANCH, N. J.—Plans are being prepared by Maximilian Zipkes & Louis Korn, Archs., 253 Fifth Ave., New York, for a 10-story hotel to be built here at a cost of $250,000.

PATERSON, N. J.—Charles E. Sleight, Arch., 129 Main St., Paterson, has let mason contract to the WILLIAM L. PLATT CONSTRUCTION CO., 152 Market St., and carpenter work to LOUIS GOTTLIEB, 97 Market St., for a 5-story brick and terra cotta apartment building, 70 × 86 ft., to be built at Ward and Clark Sts., for the Paterson Realty Co. Cost, $80,000.

PRINCETON, N. J.—The J. W. BISHOP CO., 107 Foster St., Worcester, Mass., has been awarded the contract to erect a new $500,000 Biology and Geology laboratory building at Princeton University. The building will be five stories high with basement. The main building measures 284.6 × 60 ft., with a 2-story ell measuring 63 × 42 ft. The building will be of face brick and white limestone trimmings with granite ashlar in

the lower part of the front. It will be fireproof reinforced concrete construction. The lower floor will be for museums and the upper floors for general laboratory and lecture-room purposes.

JERSEY CITY, N. J.—The general contract for the construction of a 4-story brick addition, 50 × 100 ft., to the People's Palace on the corner of Bergen Ave. and Forrest St., has been awarded by Dodge & Morrison, Archs., 82 Wall St., New York, to the A. J. ROBINSON CO., 123 East 23d St., New York. The new building will cost $110,000.

*HANOVER, PA.—Bids are asked until noon, June 8, at the office of the Pennsylvania Commission to erect a State Hospital for the Insane, Room 207, 1435 Chestnut St., Philadelphia, Pa., for the construction of a ward building, reservoirs, sewage disposal plant, coal handling machinery, cast-iron water-pipe and special castings, valves, excavation, concrete, etc., for the Homeopathic Hospital for the Insane for the Commonwealth of Pennsylvania, in Hanover Township. Philip H. Johnson, Land Title Bldg., Philadelphia, is Arch.

SHARON, PA.—At the special election, the Board of Education was authorized to issue bonds in the sum of $140,000 for the erection of public school buildings. The bond issue will be arranged at once, and it is expected that work will be started before the middle of the present summer.

EAST LIBERTY (Pittsburg post-office), PA.—Bids will be received in about six weeks for erecting a Y. M. C. A. building here, to cost about $300,000. Thomas Hannah, Diamond Bank Bldg., Pittsburg, is Arch.

PITTSBURG, PA.—Dr. E. L. Neff, Park Bldg., Dir. Dept. of Health and Charities, received the following bids on May 22: JOHN WIGGINS & CO., Reed Bldg., Philadelphia, $124,980, 120 days (awarded contract); Edward Fay & Son, $125,000, 135 days; W. S. P. Shields, $126,825, eight months; James G. Doak & Co., $129,900, 190 days; Sax-Abbott Construction Co., $134,997, seven months; Doyle & Co., $135,776, 178 days. All the building of the proposed hospital, including the isolation wards as separate structures, will be constructed of stone and brick.

MERCER, PA.—The Mercer County Commissioners at a meeting on May 14 accepted the plans of Owsley & Boucherle, Archs., Wick Bank Bldg., Youngstown, Ohio, for the erection of a court-house to be erected here this summer at a cost of $200,000. The building will be 92 × 180 ft., three stories in height, and constructed entirely of stone. It will contain a central steam heating plant and electric light plant. Bids will be asked for by the architects and the commissioners in a few weeks.

PHILADELPHIA, PA.—CRAMP & CO., Commonwealth Bldg., have a contract to build a 3-story stone addition to the Jeremiah Nichols Public School, at the corner of 16th and Wharton Sts. The building will measure 70 × 118.6 ft. The contract price is $120,000.

HARRISBURG, PA.—The contract for constructing a 5-story hotel here has been let to MERSHON BROS., Land Title Bldg., Philadelphia, Pa. It will be known as Hotel Russi, and will be erected at Third and Walnut Sts.

BALTIMORE, MD.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., July 1, for the construction and mechanical equipment (except plumbing), of an extension to the U. S. post-office, court-house, etc., at Baltimore.

Theodore W. Pietsch, Arch., American Bldg., has prepared plans for an addition to the city jail. Workshops and other improvements will amount to $150,000. Bids will be received by Municipal Art Society.

WASHINGTON, D. C.—W. F. Thomas, Munsey Bldg., and others, have purchased a site, 170 × 144 ft., on which it is proposed to erect a hotel and theater. The former is to be ten stories and basement, of colonial design and will contain about 400 rooms. Cost of two structures, about $450,000.

NORFOLK, VA.—It is proposed to construct a Y. M. C. A. building here to cost about $150,000. Dr. L. Lankford is Pres.

*CULPEPER, VA.—Bids are asked until 10 a. m., June 22, by the Board of Supervisors of Culpeper County for the purchase of $15,000 of county bonds, to run 15 years, with right reserved to redeem $5,000 after three years, $5,000 after six years and $5,000 after eight years. Bonds are to be for $500 each, with interest at 5%, payable semi-annually. W. E. Coons is Clerk.

BLUEFIELD, W. VA.—Mills & Pruitt, Archs., McCune Bldg., Columbus, Ohio, have completed plans for a 2-story school building for Board of Education, E. L. Bowman, Clerk, Bluefield. Cost, $150,000.

GREENVILLE, N. C.—Bids are asked until June 4, by the Executive Committee of East Carolina Teachers' Training School for erecting four buildings as follows: Administration building, two dormitories and the refectory; probable total cost, $100,000. Hook & Rogers are Archs., Charlotte; T. J. Jarvis is Chn. Com.

CHESTER, S. C.—Bids were received as follows May 25, at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Chester, S. C.: J. R. Simrill, Chester, S. C., $44,417; King Lumber Co., Charlottesville, Va., $32,870; Claes S. Walin, Chicago, $39,000; Charles Hoertz & Sons, Grand Rapids, Mich., $41,686; George Ittner Atlanta, Ga., $59,369; Ware & Gayle, Newport News, Va., $37,687, eight months; Holladay & Crouse, Greensboro, N. C., $33,590, 12 months; Blue Ridge Construction Co., Asheville, N. C., $31,000; R. H. Richardson & Sons, Hampton, Va., $34,638; time to complete, Dec. 1, 1909.

MARIETTA, GA.—Bids are asked until 3 p. m., July 6, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for constructing, complete, the U. S. post-office to be erected here.

ATLANTA, GA.—Samuel M. Inman will rebuild the Terminal Hotel, and is having plans prepared by Morgan & Dillon, Prudential Bldg., Atlanta. The structure will be either five or eight stories high and will cost $90,000.

JACKSONVILLE, FLA.—We are officially advised that the TURNER CONSTRUCTION CO., 11 Broadway, New York, N. Y., has been awarded the contract for the construction of a reinforced concrete warehouse for the J. G. Christopher Co., at Bay and Liberty Sts., Jacksonville. This building will be two stories high, 105 × 105 ft. The building has 50-ft. arch spans.

BIRMINGHAM, ALA.—Warren & Welton, Title Guarantee Bldg., Birmingham, and Carpenter & Blair, 475 Fifth Ave., New York, Associate Archs., are preparing plans for the 15-story Empire Building, which is to be erected by the Empire Construction Co. on Fifth Ave. and 20th St. Bids for the erection will be asked for soon.

NASHVILLE, TENN.—Carpenter & Blair, 475 Fifth Ave., New York, N. Y., are taking estimates for a 2 and 3-story club-house for the Watauga Club, Nashville. Cost, $100,000.

MEMPHIS, TENN.—The City Council is considering an ordinance to permit building a union depot at a cost of $3,000,000 in accordance with plans presented by the Memphis Railroad Terminal Co., John H. Watkins, Pres. The permit for erection of depot probably will include provision for subway construction.

*COLUMBIA, TENN.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., July 2, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Columbia.

YOUNGSTOWN, OHIO.—Plans for the new $100,000 library building have been accepted by the Library Board and bids will be advertised for at once.

CLEVELAND, OHIO.—Plans have been completed for reconstruction of the plant of the Plain Dealer Publishing Co. The building will be fireproof and in architecture and construction will be in harmony with the Federal building. Granite and terra cotta will be the finishing materials. The building will be five stories in height, and will be completed early in 1909.

Bids are asked until noon, June 6, by Carl Lorenz, Secy., Public Library Bd., Public Library Bldg., for a public library building to be erected in the new Library Park, bounded by Fulton Road, Bridge Ave. and the proposed extension of West 38th St., N. W., in accordance with the plans prepared by Edward L. Tilton, Arch., 32 Broadway, New York, N. Y.

WARRENSVILLE, OHIO.—J. Milton Dyer, and F. G. Bates, Archs., Cuyahoga Bldg., Cleveland, have plans and specifications about completed for the workhouse on the City Farm, Warrensville. Cost, $125,000. H. R. Cooley is Dir. Bd. of Public Service.

INDIANAPOLIS, IND.—The United Brotherhood of Carpenters and Joiners of America has completed its plans, bought its location and begun the preliminary work for the erection of its own international headquarters building. The plans call for a $100,000 investment and a 3-story building of pressed brick. The location has a 60-ft. frontage on East Michigan St. and a 100-ft. frontage on Hudson St., the small street between Delaware and Alabama Sts. The walls have been planned to carry another story, an auditorium floor. Vonnegut & Bohn are Archs., Indiana Trust Bldg.; Frank Duffy, State Life Bldg., is Secy.

The City Council has selected a site for a city hall. An architect will probably be selected at once to prepare plans for a building to cost not less than $450,000.

*CHICAGO, ILL.—Bids are asked by the city of Chicago, until 11 a. m., July 14, for wrecking, excavating and caissons required in connection with the construction of the new City Hall building to be erected on the west half of Block 39, original town of Chicago, according to plans and specifications on file in the office of Holabird & Roche, Archs., Monadnock Block. John J. Hanberg is Comr. Public Works.

Plans for the proposed Blackstone Hotel, to be erected at Michigan Boulevard and Hubbard Pl., have been completed by Marshall & Fox, Archs., First National Bank Bldg. The first three stories will be finished with pink Milford granite and the upper part in pressed brick and terra cotta. The frieze cornice, dormers and balustrades will be of terra cotta, crowned by a mansard surfaced with green tile. The plans provide for 469 guest chambers. The main restaurant will be on the Michigan Boulevard front, a second cafe on the west, with the office rotunda in the center. The third floor will be used for banquet and private dining rooms, a library and assembly room. Under the office will be the club floor. A palm garden will be constructed on the roof. It is expected that ground will be broken by September. The building will be about 22 stories high.

The contract will be let about the latter part of July or first of August for the proposed infirmary for which Holabird & Roche, 1618 Monadnock Block, are preparing plans. Cost, $2,000,000.

CHICAGO, ILL.—Estimates will be taken at once by Edward Shank, 108 La Salle St., Arch., for the proposed Grand Central Market House to be erected at the corner of Harrison and Loomis Sts., for the Shank Co., 108 La Salle St. It will have one story, 20 ft. high inside, will measure 140 × 476 ft. and will cost $150,000.

A union passenger station or a combination of passenger terminals to cover a plot of ground half a mile square, is being contemplated for the lower West Side. The roads interested are the Pennsylvania, A. C. Shand, Ch. Engr., Philadelphia, Pa., the Chicago, Milwaukee & St. Paul, D. J. Whittemore, Ch. Engr., Chicago, and the Chicago & Northwestern, E. C. Carter, Ch. Engr., Chicago. In addition to these lines the following roads now using the union depot will use the proposed station: Chicago, Burlington & Quincy, Chicago & Alton, Pittsburg, Cincinnati, Chicago & St. Louis and the Pittsburg, Ft. Wayne & Chicago.

CHICAGO, ILL.—M. L. Rothschild has leased the ground adjacent on the south to his present building at the corner of State St. and Jackson Boulevard. He will tear down the present building and construct at that place an 8-story fireproof building, the project costing approximately $700,000. Plans for the new building will be prepared by Holabird & Roche, Archs., Monadnock Block. It will cost $200,000. Foundations sufficiently heavy to carry eight more stories will be put in, so that eventually the entire structure will be 16 stories, fronting 85 ft. on State St. and 100 ft. on Jackson Boulevard.

Plans are being prepared by Thomas R. Bishop, 167 Dearborn St., for a 3-story apartment house to be built at 48th St. and Madison Ave., for William Hoff, 79 Dearborn St. It will be 75 × 100 ft. and will cost $100,000.

The Morrison Hotel & Restaurant Co. intends to erect a hotel to cost $1,500,000. Plans are being prepared by Marshall & Fox, First National Bank Bldg.

Paul Gerhardt, Arch., 109 Randolph St., is preparing plans for a garage, 60 × 268 ft., to be erected at 1226-30 North Clark St., for Thomas Brookside, 636 North Clark St. Cost, $85,000.

ROCK ISLAND, ILL.—The general contract for construction of the $125,000 L. P. Best building, which is to be built at 17th St. and Second Ave., in Rock Island, was let on May 20 to V. JOBST & SON, of Peoria, Ill. The building is to be of reinforced concrete. It will be six stories high and its ground dimensions will measure 90 × 150 ft. Claussen & Claussen, of Davenport, Iowa, are Archs.

DES MOINES, IOWA.—Proudfoot & Bird, Archs., Crocker Bldg., will receive estimates in about two weeks for a 3-story coliseum, 140 × 280 ft., to be built here at a cost of about $90,000.

SIOUX CITY, IOWA.—Henry Fisher, Arch., United Bank Bldg., has let general, mason and carpenter contract to W. G. MERTER, Emerson, Neb., for a 6-story brick and stone bank and office building, 50 × 100 ft., to be built at Fourth and Nebraska Sts., for the Farmers' Loan and Trust Co. Cost, $80,000.

ROCHESTER, MINN.—Contract has been let by E. Brielmaier, Arch., 111 Mason St., Milwaukee, Wis., to M. HEFFRON for constructing a hospital for St. Mary's Congregation, Rochester. Cost, $150,000.

JAMESTOWN, N. DAK.—We are officially advised that the contract for constructing a 3-story fireproof ward building for the State Hospital of North Dakota, has been let to T. POWERS, of Fargo, N. Dak. It will be built of brick, concrete and steel, and will cost $80,000. L. B. Baldwin is Supt.; M. E. Beebe, Fargo, is Arch.

*FORT MEADE, S. DAK.—Bids are asked until 10 a. m., June 15, by Capt. L. C. Scherer, Constr. Q. M., for constructing one brick bowling alley and installing electric wiring and fixtures.

OMAHA, NEB.—On May 5 the citizens voted to issue $1,000,000 of bonds for a court-house and jail. An architect has not been selected. D. M. Haverly is County Clerk.

FORT YELLOWSTONE, WYO.—Bids are asked by the Constructing Quartermaster until 3 p. m., June 15, for the construction, plumbing, heating and electric wiring of one field officers' quarters, one double captains' quarters, one bachelor officers' quarters and one double stable guard and shops building.

ST. LOUIS, MO.—It is stated that A. Blair Ridington, Arch., 620 Chestnut St., is preparing plans for an apartment building to be built on Delmar Boulevard, east of Lake Ave. Estimated cost, $200,000.

We are officially advised that J. C. ROBINSON & SON, 1 Madison Ave., New York, N. Y., have secured the contract to erect the St. Louis Cathedral, at about $3,000,000. Barnett, Haynes & Barnett, Frisco Bldg., St. Louis, are Archs.

Charles H. Deitering, Missouri Trust Bldg., is preparing plans for a 3-story apartment building, 100 × 173 ft., on Lindell Boulevard. Brick, stone and terra cotta will be used in construction. Cost, $150,000.

The Public Library Board has approved preliminary plans for Frederick M. Crunden branch library. The main floor will be in one room, 42 × 107 ft.; public meeting room in basement is to seat about 400. Contract will be awarded about June 15. James F. Lee is Chn. Bldg. Com.

NORMAN, OKLA.—The State University Board of Regents will advertise bids soon for construction of a fireproof building to cost about $250,000. Lee Cruce is Pres., Ardmore, Okla.; W. E. Ramsey, Secy., Muskogee, Okla.

GUTHRIE, OKLA.—The Senate has passed appropriation bills giving $687,000 for new buildings at the various State schools. They are distributed as follows: The Agricultural and Mechanical College, $222,000; State University, $200,000; Weatherford Normal, $100,000; Edmund Normal, $85,000; colored university at Langston, $80,000. These appropriations include the replacing of main buildings at both the State University, Normal and Langston that were destroyed by fire in the last few months.

SPOKANE, WASH.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract to the G. A. KEES DOMESTIC ENGINEERING CO., 260 East Seventh St., St. Paul, Minn., for the construction of heating plant in the Spokane post-office, at $21,998. Noted on April 30.

SEATTLE, WASH.—An 11-story fireproof building will be started within 60 days by the Metropolitan Building Co. The structure will cost about $500,000.

SEATTLE, WASH.—We are officially advised that contracts have been let as follows by George B. Lamping, Secy., Seattle Armory Comn., 505 Colman Bldg., for erecting an armory at Western [illegible] and Leonard St.: (a) General contract, [illegible] age, drainage, plumbing and gas fi[illegible] (b) steam heating and hot water su[illegible] system, (c) structural steel for roofing of [illegible] shed. Cost, $130,000. (a) MATTHEW D[illegible] & Co., Boston Block, $94,000; (b) plu[illegible] NELSON PLUMBING CO., $4,838, [illegible] heating, H. SWEENEY, 1514 Fifth St., [illegible] (c) PUGET SOUND SHIPBUILDIN[illegible] CO., $10,000. The building will be three [illegible] high, 156 × 260 ft. Lohman & Place, [illegible] Block Bldg., are Archs.

PORTLAND, ORE.—Gay [illegible] Abington Bldg., will build a 6-s[illegible] building on the quarter block at the [illegible] of Stark and Fifth Sts. The property [illegible] to the Mathew Brady Estate. The building will cost about $150,000.

The Board of Education will receive from architects competitive plans u[illegible] June 30 for the $250,000 high school [illegible] to be erected this summer. Prizes [illegible] $300 and $200 will be awarded [illegible] drawings.

LOS ANGELES, CAL.—It is [illegible] that the Trinity Methodist Episcopal [illegible] will erect a church on Flower St., near Twelfth St. Cost, $100,000.

SAN FRANCISCO, CAL.—On May 11 the City and County of San Francisco voted to issue $18,200,000 of bonds for various improvements. These include construction of schools, hospitals, a hall of justice and county jail. Marsden Manson is City Engr., Newton Thorp is City Arch.

The California Academy of Sciences has applied to the Board of Public Works for permission to erect a 10-story, Class A building to cost $290,000, on Market St., 195 ft. west of Fourth St.

PRINCE ALBERT, SASK.—We are officially advised that bids will be asked in about two weeks for constructing a 2-story and basement brick and stone high school for the Trustees of School District No. 3. The building will be fireproof and will cost $87,000, including equipment. Roland W. Lines, Edmonton, Alta., is Arch.

## WATER SUPPLY—IRRIGATION.

(* *denotes that this work is advertised in Engineering News.*)

DOVER, N. H.—The City Council on May 14 authorized the construction of a filtration plant, and other improvements to the water-works system. F. E. Quimby is City Clk.

*SPRINGFIELD, MASS.—Bids are asked until June 18 by the Board of Water Commissioners for constructing a covered masonry reservoir with gate-houses, dwelling and appurtenances, included under Little River Water Supply Contract No. 3. E. E. Lochridge is Ch. Engr.

HARTFORD, CONN.—Following the plan to strengthen the distributing system, the Board of Water Commissioners will lay a section of 16-in. pipe in State St. to connect with the 24-in. main which is to be laid in the River Boulevard; a 12-in. main in Walnut St., from Edwards to High Sts.; 100 ft. of 8-in. pipe in Kenyon St.; and 610 ft. of 8-in. pipe in Shultas Pl.

NEW YORK, N. Y.—Bids are asked until 2 p. m., June 10, by John H. O'Brien, Comr. of Water Supply, Gas and Electricity, for hauling and laying water mains and appurtenances in the Borough of Brooklyn; for furnishing and delivering pipe, pipe fittings, valves, boiler tubes, etc.; and for furnishing and delivering supplies for pumping stations, reservoirs and repair yards.

BROOKLYN, N. Y.—The lowest bid opened on May 13 at the office of John H. O'Brien, Comr. Water Supply, Gas and Electricity, New York, for furnishing, delivering and laying water mains along Trotting Course Lane and Myrtle Ave. to Cypress Ave., was that of the R. W. Carter Co. at the following prices: For 2,800 tons of straight pipe, $29; 35 tons c.-l. specials, $55; 10 tons c.-l. for stop-cock boxes, $55; 17,000 ft. of 30-in. pipe, 56 cts.; 100 ft. of 6-in. pipe, 50 cts.; 7,500 sq. yds. of block pavement, 30 cts.; 1,200 sq. yds. of macadam pavement, 25 cts.; 30 cu. yds. of brick masonry, $10; 30 cu. yds. of concrete, $6; 2,000 ft. lumber, 1 ct.; 5,000 lbs. steel, 5 cts.; 500 cu. yds. extra excavation, 1 ct.; 25 cu. yds. of rock excavation, 1 ct.; one 30-in. connection, $925; stop cocks, etc. Total $99,162. Other bids were: J. J. McCarthy, $104,226; Murphy Co., $104,567; Clinton Beckwith, $109,570; J. Kelly, $110,191; Donegan & Redmond, $110,707; H. E. Fox, $112,910; J. Z. Carey Co., $114,522; Daly & McBean, $118,619; Douglas &*Hand, $120,510; Hanover Construction Co., $121,536; H. J. Mullen, $121,958; Donlon Construction Co., $122,734; J. H. Holmes, $125,736; Sheehan Construction Co., $143,332; Pease Bros., $143,714, and Siegretto & Mennio Co., $150,838.

FORT HAMILTON (Brooklyn post-office), N. Y.—Bids are asked until 11 a. m., June 15, by the Construction Quartermaster for the extension of the water and sewer system.

ROME, N. Y.—Bids are asked by the Board of Water and Sewer Commissioners until June 10, for furnishing about 3,745 tons of c.-l. water pipe and 12 tons of specials. Knight & Hopkins, Rome, are Engrs.

BUFFALO, N. Y.—Bids are asked until 11 a. m., June 9, by the Department of Public Works for water-works supplies. F. G. Ward is Comr. Pub. Wks.

ATLANTIC CITY, N. J.—The Water Department on May 15 awarded the contract for the erection of the pumping station at Absecon to THOMPSON & STILES, at $7,834.

AVONMORE, PA.—We are officially advised that plans and estimates are being prepared by Robert H. Wilson, C. E., of Saltsburg, Pa., for a municipal water plant for this borough. An election will be held as soon as possible after the estimates are in to vote on a bond issue for construction of the plant.

MONT ALTO, PA.—Bids are asked until 5 p. m., June 9, by Samuel G. Dixon, State Health Comr., for furnishing all labor and materials necessary for the construction of a

water-works system for the Pennsylvania State South Mountain Sanitorium, near Mont Alto, Franklin County, in accordance with the plans and specifications on file in the office of the Department of Health in Harrisburg. The work includes a reinforced concrete reservoir of 300,000 gallons capacity, two concrete collecting wells of 40,000 and 7,500 gallons capacity, respectively, a pump house, two triplex pumps driven by 8-HP. gasoline engines, 5,000 ft. of 8-in. c. i. pipe lines, 4,000 ft. of 4-in. pipe lines, 10,000 ft. of 3-in. and 2-in. pipe lines, together with all appurtenances and connections to the existing water system.

BRUNSWICK, MD.—The citizens on May 18 voted in favor of issuing $15,000 of bonds for the construction of water-works. A. B. Hedges is City Clk.

WHEELING, W. VA.—The city has voted $350,000 of bonds for the improvement of the water-works plant.

MAXTON, N. C.—ABEL & EDWARDS, of Hickory, N. C., have been awarded the contract for constructing a water-works and a sewerage system at about $40,000. J. M. Bandy, of Laurinburg, N. C., is Engr.

EATONTON, GA.—WALTON & WAGNER of Eatonton, have been awarded the contract by the city for the improvement of the water-works, the work including a concrete dam at station, intake well for auxiliary supply, and a concrete-lined sedimentation basin of 170,000 gallons capacity.

BRYAN, OHIO.—We are officially advised that the contract for furnishing and laying complete about 4,130 ft. of standard weight 4-in. hub and spigot c.-i. pipe, and about 3,800 ft. of 6-in., furnishing and setting ten 4-in. hydrants and three 6-in. valves was awarded by the Board of Public Service on May 13 to the YORK CONSTRUCTION CO., of Columbus, Ohio, at about $3,500. R. L. Starr is Pres. Bd.

LEWISBERG, OHIO.—See under Light and Power Plants.

CINCINNATI, OHIO.—Bids are asked until noon June 16 by the Commissioners of Water-Works for laying c.-i. pipe and special castings and valves in Queen City Ave., from Shodwell St. to Quebec Road, and in Quebec Road from Queen City Ave. to Glenway Ave., and other miscellaneous work.

MARION, IND.—The Board of Public Works contemplates having the water mains extended in the southern portion of the city.

*MICHIGAN CITY, IND.—Bids are asked until June 5 by the Lake Michigan Water Co. for furnishing the material and improving the water supply system, the work including the construction of a submerged intake crib and laying 30-in. intake pipe. Estimated cost, $45,000. Fred C. Miller is Secy.

GRAND RAPIDS, MICH.—Bids are asked until June 25 by the Board of Public Works for a 12,000,000-gallon pump for the Water-Works Department.

SAGINAW, MICH.—The Water Board awarded the contract on May 18 to T. H. INGLEHART for laying the water main in Washington, Atwater and Franklin Sts., from Holland to Potter Sts., at $39,789.

COLLINSVILLE, ILL.—The contract for the extension of the water-works has been awarded by the City Council to T. C. BROOKS & SONS, of Jackson, Mich., at $13,620. A. C. Powell is City Engr. List of bidders noted on May 7.

WARSAW, ILL.—Plans and specifications are being prepared for the construction of a water-works system here.

MILWAUKEE, WIS.—Bids are asked until 10:30 a. m., June 4, by the Board of Public Works for furnishing all the material and doing all the work necessary to remodel the North Point pumping station of the Milwaukee water-works, bidders to submit separate bids on the following: Mason and concrete work; plastering work; cut stone work; tile work; cast iron and structural steel work; carpenter and joiner work; painting and glazing work; galvanized iron, slate and tin work; plumbing and sewerage work. August M. Garvin is City Controller.

COUNCIL BLUFFS, IOWA.—E. A. Wickham of Council Bluffs, submitted the only bid for the construction of the municipal water-works plant at $631,535.

KIOWA, KAN.—See under Light and Power Plants.

DESHLER, NEB.—GEORGE V. BALLARD of Lincoln, Neb., has been awarded the contract by the city for constructing water-works at $13,985. Bids were opened on May 12. W. E. Philby is Village Clk.

HILDRETH, NEB.—THE DES MOINES BRIDGE & IRON WORKS, Des Moines, Iowa, have been awarded the contract by the city for the construction of water-works here at $9,170. A. L. Beck is Village Clk.

*SHERIDAN, WYO.—Bids are asked until 7.30 p. m., June 9, by the City Council for the construction of a c.-i. pipe line water system, reservoir, and all appurtenances complete. Plans and specifications are on file at the office of C. W. Sheldon, City Clk.

GRAFTON, N. DAK.—Bids are asked until June 2 at the office of H. A. La Moure, Supt. North Dakota Institute for the Feeble Minded, for erecting on the grounds a 60-ft. steel tower and a tank of 10,000 gallons capacity.

WAHPETON, N. DAK.—Bids are asked until 2 p. m., June 16, by the Commissioner of Indian Affairs, Washington, D. C., for furnishing and delivering the necessary materials and labor required to construct and complete certain improvements to the water system at the Wahpeton Indian School. J. C. Clifford, Wahpeton, is Supt. C. F. Larrabee is Acting Comr.

BENTON, ARK.—St. Louis, Iron Mountain & Southern Ry. will erect a 100,000-gallon water tank, doubling its watering facilities. James W. Way, St. Louis, Mo., is Consulting Engr.

PONCA CITY, OKLA.—We are officially advised that the following bids were received on May 18 by the city for (a) the construction of water-works and for furnishing c.-i. pipe: For water-works: G. Jaeger, Rich Hill, Mo., $3,676; Kerby, Mayfield & Shaw, $3,425; M. CUNYAN, Ponca City, $3,580 (awarded contract); J. J. Dunnegan, Shenandoah, Iowa, $3,449; N. S. Sherman, Oklahoma City, Okla., $3,681; T. C. Brooks & Son, Jackson, Mich., $3,974; Hamm Plumbing Co., Enid, Okla., $3,413; A. O. Lund and J. W. Beatty, Blackwell, Okla., $3,820; Squire Electrical Co., Kansas City, Mo., $4,716; for furnishing pipe: U. S. PIPE CO., St. Louis, Mo., $7,413 (awarded contract); American C.-I. Pipe Co., Birmingham, Ala., $7,456; Hamm Plumbing Co., Enid, Okla., $7,652.

THE ENGLISH TOOL & SUPPLY CO., Kansas City, Mo., was awarded the contract for furnishing hydrants and valves. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

CANON CITY, COLO.—The contract for furnishing the material and constructing about eight miles of 26 or 30-in. conduit of either steel or continuous wood-stave pipe, a settling basin, filter, two clear water reservoirs and accessories for the water-works system was awarded on May 20 by the city to LUMSDEN & GORDON, of Grand Junction, Colo.

DENVER, COLO.—The Kit Carson Irrigation Co. filed on a reservoir site in Cheyenne County on May 13. The site will cover 1,400 acres and will hold 1,500,000,000 cu. ft. of water. Estimated cost, $350,000.

DENVER, COLO.—Specifications have been filed with T. W. Jaycox, State Engr., by Etienne A. Ritter, a mining engineer for the Three Crackers Reservoir and Ditch line in Park County, for the construction of a reservoir to cost $120,000, and to cover 840 acres. The reservoir will be fed from Sheep Creek, the south fork of the South Platte River and the Rough and Tumbling Creek.

CASHMERE, WASH.—See under Light and Power Plants.

ASTORIA, ORE.—The contract has been awarded to CHRIS LARSEN for improving the ground around the little reservoir, raising the walls, etc., at $5,197. Other bidders were: Thomas Bush, $5,500; McGuire & Jamieson, $6,337.

SAN FRANCISCO, CAL.—The citizens on May 12 voted in favor of issuing $5,200,000 of bonds for the construction of an auxiliary water system. Marsden Mansen is City Engr.

*LOS ANGELES, CAL.—Bids are asked until July 17 by the Board of Public Works for the construction of the Jawbone Division of the Los Angeles Aqueduct, with a capacity of 400 second ft., including about 43,000 lin. ft. of lined tunnel, 60,000 lin. ft. of lined conduit and 340,000 cu. yds. of excavation. Horace B. Ferris is Secy. Bd.

MINIDOKA, IDAHO.—Plans and specifications are on file at the office of Engineering News, New York, for furnishing turbines, pumps, and accessories for the Minidoka project, Idaho. Bids are asked by the U. S. Reclamation Service, 777 Federal Bldg., Chicago, Ill., until 2 p. m., June 23. F. H. Newell is Dir.

DARTMOUTH, N. S.—D. T. STEWART & CO. have been awarded the contract for the supplying of c.-i. water pipe for Dartmouth.

BRANTFORD, ONT.—The contract for constructing a storage reservoir here has been awarded to H. F. MOORES, of Kingston, Ont., at $15,000. T. Harry Jones is City Engr.

PRINCE ALBERT, SASK.—The contract for the excavation for the water-works extensions has been awarded to McVEAN & CRAIG, at $31,761.

## SEWERAGE.

(* *denotes that this work is advertised in Engineering News.*)

HARTFORD, CONN.—Bids are asked until 11 a. m., June 1, by the Board of Contract and Supply, for reconstructing a portion of the intercepting sewer. James P. Berry is Secy. Bd.

NEW YORK, N. Y.—The following are the bids opened on May 25 by John F. Ahearn, Pres. Boro. of Manhattan, for furnishing all the labor and material required for reconstruction of outlet sewers and appurtenances in 28th and 29th Sts., between East River and First Ave., and in First Ave., between 28th and 29th Sts.: M. Marrone, 414 East 116th St., $33,319; Bart Dunn, 444 East 68th St., $24,495; Smith & Fitzgeralds, $35,343; New York Sewer Construction Co., 438 East 91st St., $38,036; Joseph Moore, $28,697.

The following bids were received for furnishing all the labor and material required for reconstruction of outlet sewer and appurtenances under Pier (new) 15, East River, and in South St., between Maiden Lane and Burling Slip: Bart Dunn, 444 East 68th St., $13,927; New York Sewer Construction Co., 438 East 91st St., $12,622; J. P. Moore, $10,169; Smith & Fitzgeralds, $16,094.

ELIZABETH, N. J.—Bids are asked until July 1 by the city for the construction of an intercepting sewer. Noted erroneously last week as June 1.

*MERCHANTVILLE, N. J.—Bids are asked until 8 p. m., June 2, by Borough Council for the construction of sewers, approximately 8,600 ft. of 8-in., 300 ft. of 10-in., 3,500 ft. of 12-in., 250 ft. of 15-in. pipe, 10,000 ft. of underdrains, 4 to 6-in. and a disposal plant complete. Plans and specifications may be seen at the office of the City Wastes Disposal Co., 156 Fifth Ave., New York, or at the Mayor's office. A. W. MacCallum is Chn. Council.

*RIVERTON, N. J.—Bids are asked by Edward H. Pancoast, Chn. Highway Com. of the Borough, until 8 p. m., June 18, for furnishing material and the construction of a single-ring 36-in. brick culvert reinforced with a cement coating 1½-in. thick on the exterior corner of face, extending from the southwest corner of Broad St. and Lippincott Ave. to the Pompesse Creek, a distance of 1,740 ft., together with a brick catch-basin and six manholes with fittings. Plans and specifications may be examined at the office of Henry S. Haines, Borough Engr., Temple Bldg., Camden, N. J., or in Burlington, N. J.

*PHILADELPHIA, PA.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of main sewers under Schedule "B." Bids are asked until June 3. George R. Stearns is Dir. Pub. Wks.

HUNTINGDON, PA.—The Borough Council has received the following bids for the construction of a sewer system: Anthony Anstead, Altoona, Pa., $37,987; Central Construction & Supply Co., Harrisburg, Pa., $37,406; John Goll & Co., Philadelphia, Pa., $28,005; AHRENS CONSTRUCTION CO., Lewistown, Pa., $25,725 (awarded contract); H. E. Stail & Sons, Altoona, Pa., $34,471; C. A. Malone, Hollidaysburg, Pa., $26,232; Ferry & Co., Grafton, Pa., $27,895; Saupp & Dhrew, Altoona, $37,768; Fritz & Frey, Philadelphia, $38,892; Albrecht & Leader, Reading, Pa., $37,182; F. Guiterrez, Huntingdon, Pa., $27,641; Maynard & Flynn, Pittsburg, Pa., $33,191.

EMSWORTH, PA.—Bids are asked until 5 p. m., June 4, by the McBride Surveying & Engineering Co., Borough Engrs., for the construction of sewers in various streets.

PORTSMOUTH, VA.—Bids will be asked about June 30 for the construction of sewers in the Fifth Ward and for an addition to the pumping station. Estimated cost, about $110,000. Bascom Sykes is City Engr. Z. P. Slater is City Clk.

ROCKINGHAM, N. C.—We are officially advised that the contract for constructing sewers has been awarded by the city to C. MARKLEY, of Roanoke, Va. Gilbert C. White, Durham, N. C., is Engr.

WEST TAMPA (Tampa post-office), FLA.—The city has voted in favor of issuing $20,000 of bonds for the construction of sewers.

FORT SAINT PHILIP, LA.—Bids are asked until 10 a. m., June 15, by Capt. Arthur Cranston, Q. M., U. S. A., New Orleans, La., for the construction of a sewer system at this post.

DAYTON, KY.—Bids are asked until 8 p. m., June 1, by the City Clerk, for the construction of a vitrified brick or a concrete sewer in Main, McKinney and Vine Sts. George G. Lindsy is Engr.

COSHOCTON, OHIO.—Bids are asked until noon, June 4, by the Board of Public Service for the construction of two 8-in. sewers. R. M. Temple is Clk. Bd.

STEUBENVILLE, OHIO.—Bids are asked until noon, June 1, by the Board of Public Service for the construction of a 12-in. vitrified pipe sewer in Alley B, south of North St. H. G. Simpson is Clk. Bd.

FOSTORIA, OHIO.—GEORGE M. FINK has been awarded the contract by the Board of Public Service for the construction of sewers in Columbus Ave. and Town St., at $5,498.

FRANKFORT, IND.—Bids are asked until 2 p. m., June 2, by Worth Price, City Clk., for the construction of a 12-in. pipe sewer.

INDIANAPOLIS, IND.—The Julius Keller Construction Co. was the lowest bidder on May 20 for constructing the Morris St. sewer for West Indianapolis. The following were the bids submitted: Julius Keller Construction Co., $2.93 a lin. ft.; William Yates & Co., $2.96; Marion County Construction Co., $3.40; John Jenkins, $3.435, and Pease & Buzatt, $3.71. Blaine H. Miller is City Engr.

TERRE HAUTE, IND.—Gottschalk Bros. on May 15 submitted the lowest of three bids for the construction of a sewer in 24th St., at the following prices: Sec. A, 18-in. pipe, 72 cts.; Sec. B, 15-in. pipe, 62 cts.; Sec. C, 12-in. pipe, 52 cts.; Y's, 12 × 6 ins., $1.03; 15 × 6 ins., $1.40; 18 × 6 ins., $1.65; catch-basins, $28; curb inlet, $19; manhole, $28. The other bidders were: W. J. Erler and O'Leary & McBride.

MISHAWAKA, IND.—Bids are asked by the Common Council until June 1 for the construction of the Logan St., Laurel St. and the East End Trunk Sewer; also the East Fourth St. and the West Second St. laterals. The trunk sewers are to be concrete 36-in. and 42-in., and the laterals are pipe 10-in. to 18-in. Estimated cost, $66,000. William S. Moore is City Engr.

RICHMOND, IND.—The PARIS MERCANTILE BRIDGE & CONCRETE TILE CO., Paris, Ill., has been awarded the contract by the city for furnishing the concrete tile for the sanitary sewer here, at about $30,000.

PONTIAC, MICH.—STONE & GREEN, Chicago, Ill., have been awarded the contract by the city for the construction of the Second Ward trunk sewer, about 7,440 ft. long, and 24 to 28 ft. deep at deepest points, at $12,040.

*BELLEVILLE, ILL.—Bids are asked until 3 p. m., June 3, by the Board of Local Improvements for 20,000 ft. of sewers. Fred J. Kern is Mayor and Ex-Officio Pres. Bd.

ST. LOUIS, MO.—Bids are asked until noon, May 29, by the Board of Public Improvements for the construction of the Harlem Creek sewer in Bircher St., etc. W. B. Dryden is Secy. Bd.

*CAPE GIRARDEAU, MO.—We are officially advised that the following bids were received on May 18 by the city for the construction of the sewer system: W. C. MULLIN, Kansas City, Mo., $57,519 (awarded contract); Howes Bros. & Co., Chicago, Ill., $57,209; Reeb Brothers, Belleville, Ill., $59,233; Edward Hely, Cape Girardeau, Mo., $61,192; R. C. De La Hunt, Cedar Rapids, Iowa, $61,457. The contract, owing to irregularities in the bid of Howes Bros. & Co., the lowest bidders, was awarded to W. C. Mullin, the next lowest bidder. Chris F. Betten is City Clk.

PONCA CITY, OKLA.—We are officially advised that the following bids were received on May 18 by the city for the construction of a sanitary sewer system: J. J. Dunnegan, Shenandoah, Iowa, $17,963; Lund & Beatty, Blackwell, Okla., $16,600; Derr & Early, Oklahoma City, Okla., $20,406; Viegard Plumbing & Electrical Co., Oklahoma City, $16,887; SANDS CONSTRUCTION CO., Kansas City, Mo., $15,490 (awarded contract); M. Cunyan, Ponca City, $16,999; Hamm Plumbing Co., Enid, Okla., $16,578; Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

GOLDEN, COLO.—McGOVERN & RYAN, Pueblo, Colo., have been awarded the contract for constructing a sewer system in a portion of the city south of Clear Creek.

PORT TOWNSEND, WASH.—Bids are asked until June 1 by the city for the construction of a sewer in Southern Sewer District No. 1.

OAKLAND, CAL.—Bids are asked until 10 a. m., June 10, by the Board of Public Works for the construction of an intercepting sewer in Second St., with an outlet in Oak St. Walter B. Fawcett is Secy. Bd.

LOS ANGELES, CAL.—The Board of Public Works have awarded the contract for the construction of a sewer in Tenth St., Jasmine St., etc., to M. L. HOSTETTER at $25,975, for sewer complete. Horace B. Ferris is Secy. Bd.

OAKLAND, CAL.—Bids are asked until 11 a. m., June 10, by the Board of Public Works for the construction of an intercepting sewer in Second St. Walter B. Fawwcett is Secy. Bd.

SAN FRANCISCO, CAL. — The citizens voted on May 12 in favor of issuing $4,000,000 bonds for additions to the sewerage system. Marsden Manson is City Engr.

LIVERMORE, CAL.—Bids are asked until June 1, by the town for furnishing the material only required for the construction of a sewerage system and sewage disposal plant, the work to be done by the day under the superintendence of F. J. Boland, Hanford, Cal., Engr.

PERTH, ONT.—Bids are asked by John A. Kerr, Town Clk., until June 2, for sewer construction. Specifications and further particulars may be obtained from J. H. Moore, Town Engr.

WELLAND, ONT.—Bids are asked until May 30 by the town for the construction of a sewer about 8,000 ft. long, pipe from 12-ins. to 22 ins. Separate bids are required for concrete and vitrified pipe. Plans and specifications may be seen at the office of H. W. Boyd, Town Clk.

EDMONTON, ALTA.—The City Council has awarded the contract for furnishing sewer pipe to the EDMONTON CONCRETE CO., at $7,070.

## STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

FALL RIVER, MASS.—The contract for furnishing the city with 20,000 paving blocks of the special narrow size, to be used in the paving of widened Pocasset St., was awarded on May 16 to HENRY SAVOIE, of Fall River, at $75 per M.

BRIDGEPORT, CONN.—The contract for constructing 7,888 lin. ft. of macadam road, 58 ft. wide, on Fairfield Ave., has been awarded to the CITY OF BRIDGEPORT, at $28,555. Other bidders were: The Pierson Engineering & Construction Co., Bristol, Conn., $53,089; the B. D. Pierce, Jr., Co., Bridgeport, $36,048.

HARTFORD, CONN.—Bids are asked until noon, June 1, by the State Highway Commissioner for the construction of 5,470 ft. of macadam road in Simsbury and 6,947 ft. of gravel road in Beacon Falls, and 1,200 ft. of gravel on the Naugatuck main highway.

HARTFORD, CONN.—The State Highway Commissioner has awarded to FRANK ARRIGONI & BRO., Durham, Conn., the following contracts for constructing roads: Guilford, 2,900 ft. telford, $5,152; Branford, 8,700 ft. macadam-telford, $17,155. Other bidders were: F. T. Ley & Co., Springfield, Mass., $6,380 and $21,067; Pierson Engineering & Construction Co., Bristol, Conn., $5,550 and $17,477; The B. D. Pierce, Jr., Co., Bridgeport, Conn., $7,192 and $21,557; A. Brazos & Sons, Middletown, Conn., $5,365 and $18,009. Bids were received on May 19.

LISBON (Jewett City post-office), CONN.—The contract for constructing 4,500 lin. ft. of gravel road has been awarded to the T. H. GILL CO., Winter Hill, Boston, Mass., at $4,725. Other bidders were: William B. Wilcox, Mystic, Conn., $4,995; A. Vito, Thompson, Conn., $5,175.

NORFOLK, CONN.—The contract for constructing 4,423 lin. ft. of graded road in the town has been awarded to the Board of Selectmen at $1.81 per lin. ft. The contract calls for four 24-in. and three 20-in. tile culverts. Other bidders were: A. Vito, Thompson, Conn., $2.48; A. Brazos & Sons, Middletown, Conn., $2.49; The B. D. Pierce, Jr., Co., Bridgeport, Conn., $2.85.

ROCHESTER, N. Y.—The following bids have been received by the Board of Contract and Supply for macadam pavement on Albemarle St.: Whitmore, Rauber & Vicinus, $15,770; F. C. Lauer & Sons, $16,555; F. A. Brotsch, Jr., $16,624; Brayer & Albaugh, $17,017; H. N. Cowles, $17,276; Frank V. Brotsch Co., $18,131.

ALBANY, N. Y.—The Board of Contract and Supply on May 18 awarded the contract for paving McCarty Ave. to M. F. DOLLARD, of Albany, at $19,761.80.

NEW YORK, N. Y.—Bids are asked until 3 p. m., June 11, by the Park Board, for furnishing all the labor and materials necessary to pave with asphalt tile walks in Prospect Park, Borough of Brooklyn; for regulating, grading and paving or repaving with asphalt pavement on a concrete foundation the roadway of Prospect Park Plaza, between Soldiers and Sailors' arch and Prospect Park, Borough of Brooklyn; for regulating, grading and paving or repaving with asphalt pavement on a concrete foundation the roadway of the Traffic Road of Ocean Parkway, between Park Circle and 18th Ave., Borough of Brooklyn. Henry Smith is Pres. Bd.

*OLEAN, N. Y.—Bids are asked until 8 p. m., June 12, by the Commissioners of Public Works for improving North Fourth St. E. E. Allen is City Engr.

PENN YAN, N. Y.—The County Commissioners in conjunction with the State Highway Commissioner will probably have a state road (brick) constructed through the county. Estimated cost, $10,000 per mile.

*FREEHOLD, N. J.—Bids are asked until 11 a. m., June 16, by the Board of Chosen Freeholders of Monmouth County for the construction of a stone road, 17,497 ft. in length. George W. Patterson, Jr., is Clk. Bd.

WILKES-BARRE, PA.—Bids are asked until May 29 by H. C. Mason, Contractor, 67 Public Sq., Wilkes-Barre, for macadamizing Lee Park Ave., from Division St. to St. Mary's Cross Road, a distance of 3,450 ft., and St. Mary's Cross Road, from Lee Park Ave. to the Middle Road, a distance of 500 ft.

ALTOONA, PA.—The Board of Public Works on May 15 awarded contracts for paving 34 streets to HAGAMAN, MILLER & HAGAMAN, 688 Clinton Ave., South, Rochester, N. Y., at from $2.21 to $2.45 per sq. yd.

ALIQUIPPA, PA.—Bids are asked until noon, June 1, by the borough for grading, curbing and paving Main Ave. and Third St. Trimble & Miller are Boro. Engrs.

*KINGSTON, PA.—We are officially advised that the contract for paving with repressed fire-clay paving block, grading and curbing Chestnut Ave., from Market St. to Pringle St.; College Ave., from Market St. to Hoyt St., and Rutter Ave., from Market to Butler St., approximately 16,207 sq. yds. of pavement and 10,417 lin. ft. of curbing, was awarded on May 20 by the borough to ROBERT W. HENSON, Geneva, N. Y., at $42,362. Other bidders were: The E. M. Rosser Engineering Co., Kingston, $43,795; B. G. Coon, Kingston, $44,643. W. J. Williams is Boro. Secy.

*SALISBURY, MD.—We are officially advised that the following are the lowest bids received by the Mayor and Council on May 19, for grading, paving and draining North Division St. T. Chalkley Hatton is Consulting Engr., Wilmington, Del. J. T. Parsons is Clk. Council: For 16,000 sq. yds. of bitulithic pavement, F. E. Schneider & Co., Law Bldg., Baltimore, Md., total $62,514. For 16,000 sq. yds. brick pavement, B. F. Sweeten & Son, 111 Delaware Ave., Camden, N. J., with Portland concrete filler, total $56,599; with Pioneer asphalt filler, total $59,319; with sand filler, total $56,119.

TAKOMA, D. C.—Bids are asked until noon, June 15, by Capt. H. L. Pettus, Q. M., U. S. A., for the construction of macadam roads, asphalt block pavements, bitulithic pavements, concrete walks and curbing, brick gutters and crossings, etc.

WASHINGTON, D. C.—The Senate on May 19 passed a bill proposing to construct a road on the south bank of the Anacostia River.

CULPEPER, VA.—We are officially advised that the Stevensburg & Catalpa Magisterial Districts of Culpeper County, Va., contemplate asking bids for about 30 miles, each, of macadam roads, upon plans and specifications furnished by the State Highway Commission. The State Highway Commissioner and an engineer will be in the office of the County Clerk, Culpeper, Va., on June 10 to furnish desired information. Information can also be had of B. G. Coons, County Clk., upon application.

ATLANTA, GA.—Bids are asked until 3 p. m., June 1, by the City Clerk, for about 3,200 sq. yds. of repaving with creosoted wood block. R. M. Clayton is City Engr.

ATLANTA, GA.—Bids are asked by the Mayor and General Council until June 1 for repaving portions of Forsyth and Alabama Sts. with creosoted wooden blocks. R. M. Clayton is City Engr.

*SELMA, ALA.—Bids are asked until June 22, by Julien Smith, City Engr., for paving Water St. with brick and curbing with granite; paving Broad St. with asphalt and brick, and curbing with artificial combined curb and gutter.

VICKSBURG, MISS.—Bids are asked until 7.30 p. m., June 1, by H. J. Trowbridge, City Clk., for paving with vitrified brick, bitulithic and asphalt portions of Mulberry, Clay and South Sts.

ROGERSVILLE, TENN.—Bids are asked until 1 p. m., May 30, by the Pike Commissioners of Hawkins County, for grading 80 to 92 miles of road, and macadamizing 20 miles of roads. F. G. Phillips is Engr.

*JOHNSON CITY, TENN.—Bids are asked until 4 p. m., June 18, by E. E. Ellsworth, Recdr., for paving Improvement Districts Nos. 1, 2 and 3, and one block on Main St., approximately 21,000 yds., and 6,100 lin. ft. of concrete curb or curb and gutter. L. N. Wilson is City Engr.

CINCINNATI, OHIO.—Bids are asked until noon, June 1, by the Board of Public Service for the improvement of several streets. John J. Wenner is Clk. Bd.

YOUNGSTOWN, OHIO.—The Board of Public Service has opened bids for the paving of Wick Ave., from East Madison Ave. to Woodbine St. The lowest bidders were: For brick, S. H. De Groodt at $7,574; sheet asphalt, Cleveland Trinidad Co., $12,250; block work, S. H. De Groodt, $12,869. F. M. Lillie is City Engr.

MIDDLETOWN, OHIO.—Bids are asked until noon, June 2, by John Kunz, Clk. Bd. Pub. Serv., for the improvement of Crawford St., from Third St. to Woodlawn Ave.

LAKEWOOD, OHIO.—Bids are asked until 11 a. m., June 1, by B. M. Cook, Village Clk., for paving Orchard Grove and Lakeland Aves. with brick or asphalt.

CANAL FULTON, OHIO.—F. C. Myers, Consulting Engr., is preparing plans and specifications for paving and sewers here.

CARROLTON, OHIO.—Plans for paving West Main St. are being prepared by F. C. Myers, Consulting Engr., Canton, Ohio.

*CADIZ, OHIO.—Bids are asked until noon, June 24, by W. H. Lucas, Town Clk., for about 10,427 sq. yds. of street paving with brick.

PAOLI, IND.—Bids are asked until 2 p. m., June 2, by Alvin B. Ham, County Audr., for the construction of a gravel road.

LAWRENCEBURG, IND.—Bids are asked until noon, June 1, by William S. Fagaly, County Audr., for improving with crushed stone 6,820 ft. of highway.

DELPHI, IND.—Bids are asked until 1 p. m., June 6, by M. G. Haun, County Audr., for the construction of about 4,752 ft. of gravel and 15,751 ft. of macadam road.

PERU, IND.—Bids are asked until 10 a. m., June 3, by the Commissioners of Miami and Howland Counties, for the improvement of the county line highway, 2½ miles long.

SALEM, IND.—J. C. BROWN, of Campbellsburg, Ind., has been awarded the contract for the construction of 16,798 ft. of gravel road in Washington Township.

BROOKVILLE, IND.—Bids are asked until 1 p. m., June 5, by Charles A. Miller, County Audr., for constructing 11,950 ft. of road.

INDIANAPOLIS, IND.—The following bids were received on May 18 by the Board of Public Works for the improvement of North Pennsylvania St., from 34th to 38th Sts.: The Union Asphalt Construction Co., $8.26 per lin. ft. on each side; the Hoosier Construction Co., $8.31; the Marion County Construction Co., $8.34 per lin. ft.

CAMBRIDGE CITY, IND.—Bids are asked by the town until 7.30 p. m., June 9, for the following street improvements: 1,500 lin. ft. of 4-ft. cement sidewalk; 2,200 lin. ft. of 5-ft. cement sidewalk; 2,500 lin. ft. of cement curb and gutter; resetting stone curb and placing new cement gutter, 2,000 lin. ft.; placing storm sewer under Main St., and grading street. Plans and specifications can be seen at the office of the Town Clerk, Cambridge City, or at the office of Charles Brossmann, Consulting Engr., Union Trust Bldg., Indianapolis, Ind.

BEDFORD, IND.—Bids are asked by the Commissioners of Lawrence County until 1 p. m., June 13, for the construction of the following gravel or macadamized roads in Marion Township: Roads No. 2, Mitchel and Spring Town road, length, 11,650 ft.; No. 3, part of Seventh St. in town of Mitchel; length, 968 ft.; No. 4, part of Meridian road; length, 2,000 ft.; No. 5, Brook St., city of Mitchel; length, 1,745 ft. Bids will be received separately for the entire work. Walter G. Owens is County Audr.

LAPORTE, IND.—Bids are asked by the Commissioners of Laporte County until 11 a. m., June 11, for the construction of a macadamized road in Michigan Township. Charles H. Miller is County Audr.

FT. WAYNE, IND.—The Board of Public Works on May 15 awarded to the METROPOLITAN ENGINEERING & CONSTRUCTION CO., 218 La Salle St., Chicago, Ill., the contracts for paving four streets with sheet asphalt, about 20,158 sq. yds., at $48,385.

CALUMET, MICH.—HOOSE & PIERSON have been awarded the contract by the Board of Road Commissioners of Dickinson County for macadamizing the Iron Mountain-Twin Falls highway at $7,945. A. Carpenter is Engr.

MARQUETTE, MICH.—Bids are asked until noon, June 1, by the County Road Commissioners for grading and macadamizing three separate portions of the county road in Delta County known as the Bark River county road. A. P. Smith is County Clk.

QUINCY, ILL.—EBERT & SHANAHAN have been awarded the contract by the city for excavating, grading and paving Kentucky St., from Fifth to 12th Sts., at $18,940.

SIGOURNEY, IOWA.—The contract for the construction of (a) 10,469 sq. yds. of vitrified brick paving, pitch fill upon a 5-in. Portland cement concrete foundation, (b) 6,235 lin. ft. combined curb and gutter and (c) 1,200 cu. yds. of excavation, has been awarded to the BURLINGTON CONSTRUCTION CO., of Burlington, Iowa, at (a) $1.92, (b) 57 cts., (c) 30 cts. C. R. Allen & Co., Ottumwa, Iowa, are Engrs. List of bidders noted May 14.

HOUSTON, TEX.—The contract has been awarded to E. N. DROUET, Houston, by the city for constructing three miles of dredged mudshell pavement on Telephone road.

CENTRALIA, WASH.—MILLS & DAVIS have been awarded the contract for the construction of about 17,000 ft. of sidewalks and for street grading, at $28,400. Alfred & James bid $29,000 for this work.

SEATTLE, WASH.—All bids for the improvement of 39th Ave., from East Olin to East Pine St., by paving, and Graham Ave., from Dearborn St. to Rainier Ave., by grading, have been rejected by the Board of Public Works as excessive. R. H. Thomson is City Engr.

SPOKANE, WASH.—The following bids for street paving have been received by the city: For grading, curbing and parking Liberty Ave., from Division St. to Perry St., John Fife, $10,444; Mitchell Bros., $10,280; Julio V. Costello, $11,755; C. M. PAYNE, $9,418 (awarded contract). For sidewalking the same, between the same limits: C. M. Payne, $7,999; James C. Kennedy, $8,790; Root & Biegle, $8,075; L. B. Handley, $8,200; F. E. Nelson, $7,885; J. H. McAllister, $8,494; Foster & Gardin, $8,300; COPSON & CARSON, $7,883 (awarded contract). For grading, curbing, parking and ballasting, Walnut St., from Ide Ave. to Northwest Boulevard: Mitchell Bros., $27,000; Julia V. Costello, $29,000; JAMES C. KENNEDY, $25,450 (awarded contract). For sidewalking the same, between the same limits: James C. Kennedy, $8,200; Root & Biegle, $8,115; L. B. Handley, $7,979; F. E. Nelson, $8,049; J. H. McAllister, $8,423; Foster & Gardin, $8,120; COPSON & CARSON, $7,776 (awarded contract).

THE INDEPENDENT ASPHALT CO. has been awarded the contract for paving Second Ave., from Washington St. to Brown St., at $12,995. Engineer's estimate, $15,131.

NORTH YAKIMA, WASH.—GEORGE MILTON SAVAGE, of Tacoma, Wash., has been awarded the contract by the city for paving Yakima Ave., at $192,846. Other bidders were: H. F. Jahn & Co., Seattle, Wash., $195,608; Lister Contract Co., $202,696; International Contract Co., New York Block, Seattle, $201,418.

FORT STEVENS, ORE.—Bids are asked until 2 p. m., June 1, by the Constructing Quartermaster, U. S. A., for the reconstruction of a 3-in. plank, or the construction of a macadamized 12-ft. roadway, about 2,850 lin. ft., here.

ASHLAND, ORE.—All bids for paving with bitulithic pavement have been rejected by the City Council.

SAN BERNARDINO, CAL.—The contract for resurfacing Third St., between F and G Sts., was awarded on May 14 by the city to the WESTERN PAVING CO. at 12½ cts. per sq. ft.

TORONTO, ONT.—Bids are asked until noon, June 2, by the Board of Control for the construction of asphalt pavements, concrete pavement, bitulithic pavement, grading, concrete curbing, concrete walks, sewers. Joseph Oliver is Chn. Bd.

## MANUFACTURING PLANTS.

*(* denotes that this work is advertised in Engineering News.)*

WORCESTER, MASS.—Osgood Bradley & Sons, 18 Grafton St., will build a new plant here.

SPRINGFIELD, MASS.—C. A. Royce has purchased a site on the south side of Clinton St., near Main St., 65 × 200 ft. Mr. Royce plans to build a laundry, two stories high, that will cover practically all the lot. The laundry building, which will be of fireproof construction, will cost about $15,000.

PROVIDENCE, R. I.—The contract to construct a 2-story brick starch factory and wing, 40 × 50 ft. and 30 × 80 ft., for C. S. Tanner has been let to WILLIAM WILLIAMS, Providence, R. I. William R. Walker, Custom-house, is Arch.

ALSEN, N. Y.—We are officially advised that the FULLER ENGINEERING CO., of Allentown, Pa., has secured the contract for the designing and construction of the Seaboard Portland Cement Co.'s 7,000-bbl. plant, which is to be erected on its property near Alsen, N. Y.

NEW YORK, N. Y.—A. S. Hedman, Arch. for F. W. Whitridge, receiver of the Third Avenue R. R. Co., has filed plans for remodeling the old 2-story shops of the company, on East 65th St. An elevator is to be installed.

PATERSON, N. J.—The Excello Shirt Co., 20 Paterson St., has purchased a plot of ground, 100 × 100 ft., at Market and Jersey Sts., and will erect a mill. At the present time the company employs 200 hands, but this number will be doubled when the new mill is completed.

TITUSVILLE, PA.—The contract for constructing the building which is to be erected by the Titusville Iron Co., this summer has been awarded to E. M. CROUCH, of Oil City, Pa. Mr. Crouch has sub-let the stone work contract to WILLIAM PATTERSON, of this city. The building will be used by the Titusville Iron Co., for a power, ware and storage house. It will be of structural iron, brick and stone, and will have a floor space of 32,400 sq. ft. The structure will be 40 ft. high at the eaves, giving the company an opportunity to install two electric cranes for use in shifting all heavy articles. The company will install a gas engine of its own manufacture. This engine will be of 175 HP. It will furnish power for the machinery and electric lights as well as run the air compressors in the building.

NEW CASTLE, PA.—The United States Dry Galvanizing Co., capitalized at $450,000, will erect a plant in New Castle that will employ 200 men at the start. C. J. Kirk is Pres.

PHILADELPHIA, PA.—E. Allen Wilson, Arch., is preparing plans for the four-story factory, which is to be built by Bayuk Bros., 50 North Third St., cigar manufacturers, at the corner of Third and Spruce Sts. The lot measures 60 × 80 ft.

LEWISTOWN, PA.—The Lewistown Foundry & Machine Co., Lewistown, Pa., manufacturer of sand mining, sawmill and stave machinery, intends to enlarge its capacity by installing new machinery.

STEELTON, PA.—Charles H. Lloyd, Arch., 216 Market St., Harrisburg, Pa., advises us that the contract for constructing the cigar factory, for the United Cigar Manufacturers Co., at Steelton, has been awarded to W. S. ROEBUCK, Third and Walnut Sts., Harrisburg, Pa.

WASHINGTON, D. C.—Bids are asked until 2 p. m., June 2, by James Wilson, Secy. of Agriculture, Washington, for the installation of machinery in, and the completion of a portable refrigerating plant for the Bureau of Plant Industry.

PETERSBURG, VA.—Southern Provision Storage & Packing Co., 11 [illegible] St., recently incorporated with $100,000 [illegible] stock, will establish a plant for packing and curing meat. A building 50 × 125 ft. will be erected at cost of $20,000; cost of machinery, $5,000. A 15 to 25-ton refrigerator will be installed. John A. Gill is Pres.; F. M. Dalton is Vice-Pres.; J. T. Collins, Secy.; Walter Brown is Mgr.

BEDFORD CITY, VA.—The Bedford Can Co. will establish a can factory with a daily capacity of 50,000. A 2-story frame building, 50 × 80 ft., will be erected. W. Gills is interested.

NORFOLK, VA.—The Cramp-Dock Co. is preparing to establish its proposed plant. The company will construct two marine railway dry-docks, two wharves, shops, and provide complete facilities for ship-repair plant up to 6,000 tons. Bids are being invited on this work, also on filling, bulkheading, dredging, furnishing machinery and tools, etc. The plant will cost $200,000. J. A. C. Groner is Engr.-in-Charge.

WHEELING, W. VA.—The [illegible] plant of the Suburban Brick Works, which was destroyed by fire recently, is to be rebuilt as soon as possible. The walls which were of heavy brick will stand. The greatest damage was in the engine room and to the machinery. The gas engine is to be taken apart and may be saved.

ASHVILLE, N. C.—Arrangements are being made by W. B. McLean, R. F. D. No. 4, to build a cannery for fruit and vegetables. The plant will have a capacity of about 15,000 cans. No machinery has been purchased.

CHARLOTTE, N. C.—The Highland Park Mfg. Co., of Charlotte, N. C., will make improvements to its large plant. It will erect a mill office building and an extension to its finishing department. This new structure will be 80 ft. long, by 40 ft. wide of modern design and construction, having saw tooth roof to provide lighting in main rooms. Wire glass, metal sash and metal window frames will be used. The new building is being planned by Stuart W. Cramer, Charlotte, Engr.

WENDELL, N. C.—R. B. Whitley, of Wendell, N. C., will establish a mill for the manufacture of cotton hosiery yarns, and has completed arrangements. He will erect a main building, 200 ft. long, and 50 ft. wide, with boiler and engine room attached. The manufacturing equipment will include 3,000 spindles and accompanying apparatus, for the production of yarns. The power equipment will include a 150-HP. boiler and a 100-HP. engine. None of this machinery has been contracted for.

CLINTON, S. C.—It is stated that the Clinton Cotton Mills, of this city, will build an addition to its mills this summer.

BOYLES (Birmingham post-office), ALA.—The Birmingham Coal & Iron Co. will expend about $100,000 for improvements to No. 1 furnace. These improvements will include 400 additional HP. boiler capacity, condensing plant, blowing engine, repairs to lining in stoves and furnace, installation of system for handling raw material in stockhouse. It is expected to have furnace ready for operation within four months, with monthly capacity of 4,000 tons. None of the contracts have been awarded. C. A. Moffet, Supt. of Machinery, 906 Brown-Marx Bldg., Birmingham, Ala., will be in charge of improvements.

BRANDON, MISS.—The Planters' Gin-Compress Co. will build a cotton warehouse 125 × 200 ft., ginhouse, 22 × 70 ft., and seedhouse 25 × 100 ft. It will be of mill construction, with automatic sprinklers, fire pump and hose, 50-lamp dynamo for lighting. The buildings and machinery will cost $25,000. The company acts as its own contractor. William H. Turcott is Engr.-in-Charge.

NEW ORLEANS, LA.—A bread, pretzel and biscuit factory to cost $125,000 will be built by the Consumers' Bread & Baking Co. on a site bounded by Melpomene, Claiborne, Josephine and Derbigny Sts. The plant will manufacture macaroni, vermicelli and all sorts of Italian alimentary paste. The directors are as follows: Morris Brohn, Pres.; Peter Clark, Vice-Pres.; Frank J. Cerise, 201 Canal St., Treas.; Jules Durand, Secy.; D. J. Kerrigan, Ed. Salathe, J. H. Kuchler, Clemens Georgie, J. H. Herman, Jr., A. J. Nobles, John A. Ricks, O. B. DeLord, James Burns, Charles O. Weber, A. Soraparu, Frank Burke, Charles Heywood, W. G. McNulty, E. Mazerau Reynes. Frank E. Rainold, Hennen Bldg., is Atty.

The Retailers' Ice & Cold-Storage Co., Ltd., has awarded contract to JAMES GEARY, 513 Carondelet St., for erection of buildings, which include frame structure for ice tank, brick boiler-house and a machinery building.

SALEM, OHIO.—The contract for the structural steel work for the factory building of the American Case & Register Co., has been awarded to the REPUBLIC IRON & STEEL CO., Citizens Bldg., Cleveland. The framework will be steel throughout, and the remainder of the construction will be of concrete. It is probable that the steel work will be begun within 30 days.

MARION, OHIO.—The Marion Steam Shovel Co. has had plans prepared for an addition, 80 × 300 ft., to its plant. This addition will be fitted with furnaces and machinery for making steel.

COLUMBUS, IND.—The Indianapolis, Columbus & Southern Traction Co. will ask for bids soon for the construction of a crosstie and timber preserving plant. A. A. Anderson, Seymore, Ind., is Gen. Mgr.

CHICAGO, ILL.—We are officially advised that the TURNER CONSTRUCTION CO., 11 Broadway, New York, N. Y., has been awarded a contract for reconstruction work in reinforced concrete for the Murphy Varnish Co., 244 East 22d St., Chicago.

Plans are being prepared by Schmidt, Garden & Martin, 172 Washington St., for a manufacturing building to cost $2,000,000 and to be erected at the end of South Market St. The plans call for a building of 17 stories.

OMAHA, NEB.—The Omaha Mitten & Mfg. Co. has completed plans for the erection of a $15,000 factory building.

KANSAS CITY, MO.—The Irving-Pitt Mfg. Co., 411 East Eighth St., will erect an addition to be equipped for manufacturing loose-leaf books. The building is to be 100 x 82 ft., three stories and basement. Cost, $40,000.

Sheppard & Farrar, Archs., Long Bldg., have let general contract to GEO. L. BROWN & SON, American Bank Bldg., for a 6-story brick and stone factory building, 128 x 150 ft., at Eighth and Santa Fe Sts., for the Loose Wiles Candy & Cracker Co., Eighth and Santa Fe Sts. Cost, $150,000.

BROWNBIL, TEX.—The Kirby Lumber Co., Houston, Tex., which will rebuild burned saw and planing mill at Browndel, has awarded contract to the BERLIN MACHINE CO., Beloit, Wis., represented by Eugene A. Donnelly, New Orleans, La., to supply machinery costing about $15,000. The plant will have a capacity of 150,000 ft. daily.

FORT BLISS (El Paso post-office), TEX.—Bids are asked by the Constructing Quartermaster, Fort Bliss, until 11 a. m., June 8, for constructing a shop building for the use of blacksmith and wheelwright.

DURANT, OKLA.—The Durant Cement, Tile & Brick Factory will be established by Dane & Biffle. A concrete-block building, 60 x 100 ft. will be erected and equipped at cost of $25,000, to produce concrete blocks, cement, tile and brick.

SPOKANE, WASH.—The Washington Mill Co., Spokane, whose plant was destroyed by fire recently, has decided to rebuild. It has been decided to erect buildings of slow burning construction. The warehouse and offices are to be of brick and the entire plant will be equipped with a sprinkler system and machinery, which will include equipment for making doors, K. D. sash, colonial columns and general mill work. It is probable that the machinery will be driven by small motors by current distributed from a dynamo in the main engine room.

QUINCY, WASH.—The Quincy Farmers' Elevator Co. has been formed and plans have been prepared for a wheat elevator which it intends building.

SYDNEY, N. S.—The Marine & General Engineering Co., Ltd., has purchased a site for erection of machine shops and foundry building. Construction will start soon. The company plans to build a wharf.

VICTORIA HARBOR, ONT.—The Canadian Pacific Ry. Co. will erect a grain elevator here, which will have a capacity of about 10,000,000 bushels. George Spencer is Gen. Supt.; G. L. Wetmore is Div. Engr., both at North Bay, Ont.

HAMILTON, ONT.—The Independent Brewery Co., Hamilton, will erect a brewery to cost about $200,000.

LONDON, ONT.—A permit has been taken out by George White & Sons for the erection of a plant east of Rectory St., to cost $15,000.

FORT WILLIAM, ONT.—Bids will be received by the Grand Trunk Pacific Ry. Co. for the erection of a grain elevator with a capacity of 2,000,000 bushels. B. B. Kelliher is Ch. Engr., Montreal, Que.

SASKATOON, SASK.—The Canadian Pacific Ry. Co. has decided to erect a machine shop in connection with other buildings in Saskatoon, Sask., at a cost of about $20,000. W. E. Woodhouse, Calgary, Alta., is Master Mechanic.

REGINA, SASK.—A 500-bbl. flour mill and a 100-bbl. oatmeal mill will be erected this summer in place of the Regina Flour Mills Co.'s plant recently destroyed by fire.

EL PALMA, MEX.—The Cananea, Yaqui Riker & Pacific R. R. Co. has let contract to CARL LEONARDT for a roundhouse, machine shops, water tower and other railroad buildings at El Palma. All the buildings will be of reinforced concrete, including two 155-ft. stacks on the shops. There will be a water tank, which will be 90 ft. high and 40 in diameter. Cost, $200,000. E. Randolph, Tucson, Ariz., is Pres. and Gen. Mgr.; J. W. Small is Supt. of Motive Power, Tucson.

## MISCELLANEOUS CONTRACTS.

*(* denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

STEAMERS.—San Francisco, Cal.—Bids are asked by the Depot Quartermaster until 2 p. m., June 15, for construction of from one to four 60-ft. wooden steamers for Harbor Service.

HOT-HOUSE.—Trenton, N. J.—Bids are asked by the Board of Park Commissioners until 3 p. m., June 5, for building and erecting a hot-house in Cadwalader Park, Trenton. Edward B. Fletcher, Clerk.

DITCH.—Muncie, Ind.—Bids were received on May 14 for the construction of a ditch through Center and Mt. Pleasant Townships. Contract was awarded to J. J. BRUMBAUGH, Elkhart, Ind., at $10,000.

REPAIRING WHARF.—Boston, Mass.—Bids are asked until 10 a. m., June 2, by Capt. Ira L. Fredendall, Q. M., U. S. A., for building an addition to wharf at Fort Andrews, Peddock's Island, Boston Harbor.

LAYING CABLE.—Chicago, Ill.—Bids are asked by William Carroll, City Electrician, until 11 a. m., June 2, for dredging a trench across the Calumet River at 106th St., city of Chicago, and placing a cable therein, etc.

AIR COMPRESSOR.—Philadelphia, Pa.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., June 13, for installing one 5,000-cu. ft. air compressor at the Navy Yard, League Island. Specifications are on file at the office of Engineering News, New York. R. C. Hollyday is Ch. of Bureau.

LEVEE.—Memphis, Tenn.—Bids are asked until noon, June 16, by Capt. William D. Connor, Corps Engrs., U. S. A., Memphis, for about 540,000 cu. yds. of levee work in Upper and Lower St. Francis Levee Districts.

DITCH.—Redwood Falls, Minn.—Bids were received on May 12 at the office of L. P. Larson, County Audr., for constructing Ditch No. 10. Contract was awarded to JERRY SHERWOOD, Litchfield, Minn., at about $7,000.

*CONCRETE WALL.—Riverton, Ala.—Bids are asked until 11 a. m., June 27, by Major William W. Harts, Corps Engrs., U. S. A., Nashville, Tenn., for constructing concrete river wall at Colbert Shoals Canal, near Riverton.

BRUSH AND POLES.—Vicksburg, Miss.—Bids are asked by Capt. Clarke S. Smith, Corps Engrs., U. S. A., Vicksburg, until noon, June 16, for furnishing and delivering brush and poles for use of the Third District, improving Mississippi River.

DREDGING.—Boston, Mass.—One bid was received by Lieut.-Col. Edw. Burr, Corps Engrs., U. S. A., Boston, on May 21 for dredging in Malden River. It was submitted by the Bay State Dredging Co., 185 Summer St., Boston, at 49⅞ cts. per cu. yd.

WHARF, BREAKWATER.—Ft. Morgan, Ala.—Bids are asked until June 15 by Capt. L. F. G. Garrard, Jr., Constr. Q. M., Ft. Morgan, for constructing a wharf at Ft. Gaines and also constructing a breakwater and extending wharf at Ft. Morgan.

*DAM, GUIDEWALL, ETC.—Cincinnati, Ohio.—Bids are asked until 2 p. m., June 6, by Lieut.-Col. J. G. Warren, Corps Engrs, U. S. A., Cincinnati, for constructing dam, guidewalls and dwellings, etc., at Lock No. 1, Levisa Fork of Big Sandy River at Chapman, Ky.

DRINKING FOUNTAINS.—New York, N. Y.—Bids are asked by the Department of Parks until 3 p. m., June 4, for furnishing full-size model, mold, piece molds, labor and materials and casting bronze drinking fountains for the Department of Parks, Boro. of Bronx.

RIVER CUT-OFF.—Marysville, Cal.—Bids were received by the State Engineer on May 11 for construction of Yuba River cut-off at Marysville. Contract was awarded to the CALIFORNIA RECLAMATION CO., at 7.85 cts. a cu. yd. Estimated quantity, 200,000 cu. yds. of excavation.

DAM, BRIDGE, ETC.—Winnipeg, Man.—Bids are asked until July 8 by Fred Gelinas, Secy. Dept. Public Works, Ottawa, Ont., for constructing a movable dam, steel service and highway bridge, repair shop, etc., at St. Andrew's Rapids, Red River, Man. A. R. Dufresne is Resident Engr., Winnipeg, Man.

ROOT HOUSE.—Fort Meade, S. Dak.—Bids were received as follows on May 20 by Capt. L. C. Scherer, Q. M., for constructing one concrete root house reinforced with steel: South Dakota Concrete Construction Co., Rapid City, S. Dak., $6,400; N. Farlow, Fort Meade, S. Dak., $9,345; Grams & Schummer, Sturgis, S. Dak., $5,820.

TELEPHONE SYSTEM.—Harding, Man.—Bids are asked by W. V. Stevenson, Secy.-Treas. of the municipality of Woodworth, until noon, June 12, for the construction of a telephone system throughout the municipality. Plans and specifications may be seen at the municipal offices there and also at the office of the Provincial Department of Telephones, Winnipeg, Man.

PILE DOCK.—Galveston, Tex.—Bids were received by F. P. Sargent, Comr.-Gen. of Immigration, Washington, D. C., on May 14, for the construction of pile dock at Pelican Spit, in harbor of Galveston: Isaac Heffron, Galveston, oak, 36 × 61 ft., or other wood, 36 × 56 ft., creosoted and driven, 88 cts. per lin. ft.; Chas. Funk, of Galveston, oak driven, 36 × 60 ft., 43.6 cts. per lin ft., and other wood, 36 × 60 ft., creosoted and driven, 68.6 cts.

RAILINGS, ETC.—New York, N. Y.—Bids were received as follows on May 21 by J. W. Stevenson, Comr. Bridges, for constructing the railings on the footwalks and the lower floor, and the ornamental work on the four towers of the Blackwell's Island Bridge over the East River, between the Boroughs of Manhattan and Queens: Northeastern Construction Co., 225 Fifth Ave., $155,821; Chas. Meads & Co., 299 Broadway, $184,184; J. H. Gray & Co., Fuller Bldg., $208,000; Maryland Steel Co., 71 Broadway, $205,880; Heckla Iron Works, $314,200; Vulcan Rail & Construction Co., 45 Broadway, $209,884; H. H. Uris, 525 West 26th St., $174,000; McHarg-Bart & Co., 299 Broadway, $222,000.

SUBWAY.—New York, N. Y.—Contracts have been awarded as follows by the Public Service Commission, First District, for construction of six sections of the Fourth Ave. subway in Boro. of Brooklyn—(1) Flatbush Ave. extension, Nassau St. to Willoughby St., Manhattan Bridge, No. 1, JAMES P. GRAHAM; (2) Willoughby St. to Ashland Pl., WILLIAM BRADLEY; (3) Ashland Pl. to Sackett St., WILLIAM BRADLEY; (4) Sackett St. to Tenth St., E. E. SMITH CONTRACTING CO.; (5) Tenth St. to 27th St., TIDEWATER BUILDING CO. and THOMAS B. BRYSON (joint bid); (6) 27th St. to 43d St., E. E. SMITH CONTRACTING CO. Full list of bids received on May 8 was given on May 14.

CONCRETE WALL.—New York, N. Y.—Bids were received as follows by the Department of Parks on May 21 for furnishing all the labor and materials for completely erecting and constructing the concrete wall, piers and footing and reinforced concrete posts, surmounted by an electrically-welded iron fence, on the eastern extension of Bronx Park, New York: F. P. Reynolds, $3.98 per ft.; Haggerty Contracting Co., 21 Park Row, $2.90; John F. O'Heir, $3.75; D. G. Pecora, $4; Abbott-Gamble Co., 32 Broadway, $7.63; Thos. Leahy Construction & Engineering Co., 1446 Prospect Ave., $3.10; McHarg, Bart & Co., 299 Broadway, $4.35; Jos. F. Eagan, 306 West 68th St., $4.33; D. L. Delaney, 590 Fordham Road, $3.25; Guidone & Gilardi, 1 Madison Ave., $3.85; R. K. Everett Co., 32 Union Sq., $3.97; J. M. Knopp, 230 West 19th St., total bid, $20,660.

VESSELS.—Washington, D. C.—Bids were received as follows by the Quartermaster-General, U. S. A., Washington, D. C., for furnishing a number of vessels for the Quartermaster service: Newport News Shipbuilding & Dry Dock Co., Newport News, Va., three, $224,496; four, $288,774; five, $352,296; six, $422,910; seven to ten, $68,329 each; complete, May 24, 1909. Puget Sound Shipbuilding Co., Richmond Beach, Wash., one, $65,000; two, $126,000; complete, ten months. Pusey & Jones, Wilmington, Del., one, $71,768; two, $137,300; three, $205,950; four, $274,650; complete, June 5, 1909. Willamette Iron & Steel Co., Portland, Ore., one, $60,000; two, $115,000; June 1, 1909. Bath Iron Works, Bath, Me., one, $73,400; two, $142,400; three, $200,600; four, $278,800; five, $347,000; six, $414,800; complete, Feb. 13, 1909. Racine Boat Co., Muskegon, Mich., one, $58,186; two, $113,806; three, $168,646; July 11, 1900. Charles L. Seabury Gas Engine & Power Co., Morris Heights, N. Y., one, $67,800; two, $133,600; three, $197,000; complete, March 15, 1909. Fore River Shipbuilding Co., Quincy, Mass., one, $67,020; two, $126,150; three, $184,702; four, $243,285; five, $301,865; six, $360,457; seven to twelve, $58,925 each; complete, April 6, 1909. Maryland Steel Co., Sparrow's Point, Md., one, $73,000; two, $137,700; three, $201,150; four, $262,200; five, $322,800; six, $386,000; seven to twelve, $67,300 each; Sept. 1, 1909. John H. Dialogue & Sons, Camden, N. J., one, $74,500; two, $145,300; three, $217,600; March 1, 1900. William Cramp & Sons Shipbuilding & Engine Co., Philadelphia, one, $71,800; two, $141,000; three, $210,000; four, $274,600; five, $341,600; six, $407,200; seven to twelve, $67,300 each; Sept. 1, 1909. Durlee Dry Dock Co., Port Richmond, N. Y., one, $74,500; two, $145,300; three, $217,600; four, $290,000; five, $362,300; six, $434,500; May 2, 1909. Union Iron Works, San Francisco, Cal., one, $76,300; two, $146,000; April 1, 1909. New York Shipbuilding & Dry Dock Co., Camden, N. J., four, $274,000; five, $339,000; six, $405,000; seven to twelve, $66,500 each; May 1, 1909.

## CONTRACT PRICES.

**[Where * precedes items under Contract Prices the work was advertised in Engineering News.]**

*PRESSURE TUNNEL.—New York, N. Y.—Bids were received on May 12 by the Board of Water Supply for the construction of the Walkill pressure tunnel, being a portion of Walkill division of the Catskill aqueduct, crossing under the valley of the Wallkill River, in the towns of New Paltz and Gardiner, Ulster County, New York. Bids in detail were as follows: (A) S. Pearson & Son, Inc., Long Island City, N. Y.; (B) Bradley Contracting Co., 329 West 68th St., New York; (C) MacArthur Bros. Co., 11 Pine St., New York; (D) T. A. Gillespie Co., 90 West St., New York:

| | (A) | (B) | (C) | (D) |
|---|---|---|---|---|
| 130 lin. ft. construction shafts, in earth | $166.00 | $75.00 | $100.00 | $300.00 |
| 950 lin. ft. construction shafts, in rock | 118.00 | 125.00 | 260.00 | 300.00 |
| 130 lin. ft. refilling construction shafts | 6.47 | 20.00 | 10.00 | 15.00 |
| 105 lin. ft. waterway and drainage shafts in earth | 68.00 | 100.00 | 75.00 | 300.00 |
| 13,000 cu. yds. rock excavation in waterway and drainage shafts | 8.82 | 6.00 | 14.00 | 15.00 |
| 425 M. ft. B. M. timbering in waterway and drainage shafts | 103.00 | 60.00 | 100.00 | 80.00 |
| 500 M. ft. B. M. maintenance and removal of shaft timbering | 9.77 | 25.00 | 30.00 | 40.00 |
| 253,000 cu. yds. excavation of pressure tunnel | 5.25 | 6.00 | 6.70 | 8.00 |
| 500 sq. yds. additional trimming in shafts and tunnel | 5.00 | 10.00 | 10.00 | 10.00 |
| 1,220,000 lbs. furnishing structural steel roof support | .06¼ | .04 | .04 | .05 |
| 1,220,000 lbs. erecting structural steel roof support | .00⅞ | .03 | .04 | .05 |
| 125 M. ft. B. M. temporary timbering | 70.00 | 55.00 | 75.00 | 100.00 |
| Construction pumping plant, lump sum | 53,600.00 | {65,000.00 / 50,000.00* | 215,000.00 | 60,000.00 |
| 500,000 mil. ft. gal. pumping from shafts and pressure tunnel | .43¾ | .... | .40 | .20 |
| 25,750 lin. ft. shafts, tunnel and drift, drainage channels for shafts and pressure tunnel | 2.19 | 4.00 | 2.50 | 2.00 |
| 1,220 lin. ft. of shaft forms for lining waterway and drainage shafts | 2.50 | 10.00 | 8.00 | 10.00 |
| 360 lin. ft. of shaft forms for inner lining of drainage shaft | 2.00 | 10.00 | 8.00 | 10.00 |
| 23,470 lin. ft. tun. and drift forms for lining of tunnel and drainage drift | 3.12 | 5.00 | 3.50 | 5.00 |
| 7,800 cu. yds. concrete masonry in shafts | 4.75 | 8.00 | 10.00 | 10.00 |
| 100,000 cu. yds. concrete masonry in tunnel and drainage drift | 4.75 | 8.00 | 7.75 | 8.00 |
| 5,000 cu. yds. excess concrete masonry in shafts, tunnel and drift | 3.00 | 3.00 | 3.00 | 3.00 |
| 200 cu. yds. brick masonry in shafts and tunnel | 17.50 | 20.00 | 20.00 | 16.00 |
| 7,000 cu. yds. dry packing in pressure tunnel | 2.00 | 3.00 | 3.50 | 3.00 |
| 17,500 sq. ft. drainage interlining in drainage shaft | .20 | .75 | .35 | .20 |
| 7,500 lbs. castings and valves in drainage drift and shaft | .12 | .10 | .20 | .10 |
| 8,500 lbs. bronze access door and frame | .60 | .50 | 1.00 | .75 |
| 60,000 lbs. structural steel interlining in drift and tunnel | .07¾ | .07 | .10 | .10 |
| 450 sq. ft. cutting channels for water-stops | .40 | 2.00 | 2.00 | 2.00 |
| 415 lin. ft. lead-lined 16" cast-iron pipe and specials | 18.75 | 40.00 | 15.00 | 40.00 |
| 2,500 lin.ft. drilling 1½" or smaller holes in rock | .35 | 1.00 | .40 | .60 |
| 2,500 lin. ft. drilling 1¾" to 2½" holes in rock | .45 | 1.00 | .50 | 1.00 |
| 40,000 lin. ft. 2" or smaller w.-l. pipe for grouting, etc. | .20 | .25 | .25 | .50 |
| Miscellaneous plant and equipment for grouting, lump sum | 5,000.00 | 5,000.00 | 10,000.00 | 5,000.00 |
| 10 high-pressure air-compressors for grouting | 2,186.00 | 1,000.00 | 300.00 | 300.00 |
| 10 tank grouting machines | 180.00 | 500.00 | 300.00 | 250.00 |
| 50 grouting pads | 69.00 | 25.00 | 150.00 | 100.00 |
| 7,000 Connecting grouting machines to grout pipes | .83 | 2.00 | .75 | 2.50 |
| Setting 2,000 grouting pads | .83 | 2.00 | 1.00 | 1.00 |
| 3,700 tons sand for grout | 1.56 | 2.00 | 1.50 | 2.00 |
| 5,000 cu. yds. mixing and placing grout | 5.00 | 2.00 | 10.00 | 7.00 |
| 2 hydrostatic tests of tunnel | 5,000.00 | 20,000.00 | 5,000.00 | 5,000.00 |
| 12,500 cu. yds. earth excavation in open cut | .50 | 1.00 | .60 | 1.00 |
| 25,000 cu. yds. refilling and embanking | .50 | .75 | .50 | .80 |
| 26,000 cu. yds. excavating top-soil | .50 | .62 | .55 | 1.00 |
| 31,000 cu. yds. surface dressing of earth | .50 | .50 | .60 | .50 |
| 50 M. ft. B. M. timber and lumber | 60.00 | 55.00 | 60.00 | 60.00 |
| 2,200 cu. yds. rock excavation in open cut | 2.50 | 2.50 | 1.25 | 3.00 |
| 3,500 cu. yds. concrete masonry in open cut | 5.90 | 8.00 | 10.00 | 10.00 |
| 300 cu. yds. reinforced concrete not in tunnel | 7.00 | 10.00 | 18.00 | 15.00 |
| 55,000 lbs. steel for reinforcing concrete | .04 | .04 | .05 | .05 |
| 3,100 lbs. miscellaneous cast iron, wrought iron and steel | .17½ | .05 | .08 | .10 |
| 190,000 bbls. Portland cement | 2.10 | 1.90 | 1.50 | 1.75 |
| 450,000 lbs. sulphate of alumina for waterproofing | .01⅜ | .04 | .03 | .02 |
| 20 tons cast-iron pipes and special pipe castings | 90.00 | 100.00 | 120.00 | 100.00 |
| 4 10-in. and smaller sluice-gates | 100.00 | 50.00 | 100.00 | 60.00 |
| 8,000 lbs. bronze pipe and miscellaneous bronze | .62 | .75 | 1.00 | 1.00 |
| 200 lin. ft. vitrified pipe | .75 | .50 | .50 | 1.50 |
| 250 cu. yds. dry rubble masonry and paving | 5.00 | 3.00 | 4.00 | 4.00 |
| 1,750 cu. yds. surfacing permanent roads | 2.50 | 1.50 | 3.00 | 4.00 |
| 85 lin. ft. reinforced concrete ladders | 1.25 | 5.00 | 3.00 | 5.00 |
| Moving DuBois house, lump sum | 1,200.00 | 1,500.00 | 3,000.00 | 2,500.00 |
| 4 locker houses | 1,270.00 | 500.00 | 1,000.00 | 1,000.00 |
| Cleaning up, lump sum | 5,000.00 | 10,000.00 | 3,000.00 | 15,000.00 |
| Totals | $3,304,900 | $3,786,975 | $4,352,165 | $4,685,450 |

Time, 51 months. Bond required, $750,000. Engineer's estimate, $4,511,000.

*As actually bid, this was $50,000 per mil. ft. gal.

## Readers' Wants

**If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.**

PORTABLE HOUSES.—Tientsin, China.—Adams & Knowles, Architects & Engineers, 57 Victoria Road, Tientsin, North China, write us for information concerning portable houses suitable for club houses.

MOTOR CARS.—Austin, Tex.—We are advised by Kerbey & Smith, 826 Congress Ave., Austin, that they desire to communicate with manufacturers of street cars running on rails and driven by their own power.

SHEET FELT.—Penn Station, Pa.—We are in receipt of a letter from the Hockensmith Wheel & Mine Car Co., Penn Station, Pa., advising us that they are in the market for hair felt in sheets for use in journal boxes.

FURNACES.—Richmond, Va.—The Glacier Metal Co., Richmond, which is erecting a plant for the manufacture of Babbitt metal, brass, etc., desires information concerning furnaces, etc., for manufacturing these metals.

WRAPPING AND PACKING MACHINERY.—Madison Wis.—We are asked by B. V. Edwards, 627 Lake St., Madison, to furnish names of concerns who manufacture machinery for wrapping soap, butter and similar commodities and also machinery for packing the same in boxes.

## INDUSTRIAL NOTES.

THE LIBRARY BUREAU, Chicago, announces the opening of its new store at 160 Wabash Ave., Chicago, for the sale of vertical filing cases, card-index and loose-leaf systems, and steel and wooden furniture for offices and libraries.

THE BUFF & BUFF MFG. CO., manufacturers of surveying instruments, Jamaica Plain, Mass., advise us that the demand for their instruments is very strong and that they are contemplating running their factory overtime to fill orders.

THE NEW YORK OFFICES of the C. H. Wheeler Mfg. Co., makers of the C. H. Wheeler Improved Surface Condenser, Mullan Suction Valveless air pumps, and feed water heaters, have been moved to the Engineering Bldg., 114-118 Liberty St. Charles Lang is New York representative.

THE TURNER CONSTRUCTION CO., Engineers and Contractors for reinforced concrete construction, 11 Broadway, New York, have opened a branch office in the Builders' Exchange Bldg., Buffalo, N. Y. This office will handle Western business and will be under the direction of James L. Bruff.

THE MONESSEN FOUNDRY & MACHINE CO., of Monessen, Pa., through the Golden-Anderson Mfg. Co., of Pittsburg, Pa., has been awarded the contract for furnishing all triple acting non-return valves for the plant of Armour & Co., Chicago. The contract amounts to about $14,000.

THE ABENAQUE MACHINE WORKS, of Westminster Station, Vermont, has established a store at 77 Oliver St., Boston, where it is intended to carry in stock a sample line of the portable and stationary gas and gasoline engines and other machinery built by these works. A large stock of repair parts for the machines from these works will also be maintained.

THE TWIN CITY EQUIPMENT CO., of Minneapolis, Minn., has established an office at Spokane, Wash., at 318 Hyde Bldg., and a storage warehouse with ample track facilities to take care of its rapidly increasing business in that vicinity. The company has appointed as its Western manager, C. W. Bickford, a practical contractor's superintendent of a number of years' experience and wide acquaintance.

THE PITTSBURG & LAKE ERIE R. R. CO., according to reports, has ordered the Standard Steel Car Co. to begin construction of 2,000 all-steel cars for that road. The new cars will be used to handle the tonnage between the coal and coke regions and the lakes. The order calls for 1,000 specially designed all-steel coke cars and 1,000 all-steel gondolas. The contract was awarded originally last summer, but held up.

THE SCULLY STEEL & IRON CO., Chicago, Ill., has purchased the property and business of Kelley, Maus & Co., including two modern warehouse buildings, each 100 × 300 ft. Additional warehouses are now to be built, of steel construction, with complete conveying and handling machinery. The company deals in structural steel, boiler plate, bars, rods, boiler tubes and iron-working machinery. The lighter hardware business will be handled by an auxiliary company (under the same ownership) to be known as the Chicago Iron Store Co.

THE NEW YORK OFFICES of the American Spiral Pipe Works have been removed from 39 Cortlandt St. to larger and better equipped offices in the Hudson Terminal Bldgs., 50 Church St. F. B. Sanborn is in charge, and is prepared to furnish complete information and prices of "Taylor's Spiral Riveted Pipe" for hydraulic mining, exhaust steam, and all other water supply work. This pipe is furnished 3 to 40" diameter up to ¾" in thickness, and for pressures up to 500 lbs. It is fitted with improved forged steel flanges or all steel bolted joints. This company is also prepared to furnish forged steel flanges for all classes of pipe and other purposes, including welding flanges, boiler flanges and high pressure steam pipe flanges.

J. H. WAGENHORST & CO., Youngstown, Ohio, report the following recent sales of automatic electric blue printing machines: Haskell-Barker Car Co., Michigan City, Ind., Pittsburg Railways Co., Pittsburg, Pa., Chicago Railway Equipment Co., Chicago, Ill., City of Minneapolis, Minn., Bailey & Fuller, Peoria, Ill., H. G. Ferree, Memphis, Tenn., Eller Manufacturing Co., Canton, Ohio, U. S. Government, Washington, D. C., Cleveland Cliffs Iron Co., Ishpeming, Mich., Gulf Pipe Line Co., Tulsa, Okla., A. S. Gilman Printing Co., Cleveland, Ohio, Tuttle & Pike, Kansas City, Mo., Alexander Blair, Macon Ga., Duluth Street Railway Co., Duluth, Minn., American Optical Co., Southbridge, Mass., U. S. Arsenal, Watertown, Mass., Armour & Co., Chicago, Ill., Omaha Engineering & Blue Print Co., Omaha, Neb.

THE GENERAL OFFICES and sales departments of Fairbanks, Morse & Co., formerly at the corner of Franklin and Monroe Sts., are now located in their new buildings with offices at the corner of Wabash Ave. and Eldredge Pl., Chicago. This is the home office of the company. The new office building is a seven-story structure, with basement, fronting 165 ft. on Eldredge Pl. and 43 ft. on Wabash Ave. The company has also completed a new warehouse, a 5-story brick structure, 100 × 100 ft., with track facilities on Sangamon St., and alley on the opposite side with wagon shed. The main entrance is on 19th St. The warehouse capacity has been very much increased, as it is the intention to carry much larger stocks than heretofore, which will enable the company to make shipments promptly and otherwise handle their fast growing business to better advantage. Fairbanks, Morse & Co. also report that their branch houses at Denver, Omaha and San Francisco have recently moved into new buildings and that their Los Angeles house will move into a new building within a few months. The steadily increasing business during the past few years has made necessary the extension of their office and warehouse facilities.

## TRADE PUBLICATIONS.

HAND AND POWER TOOLS, STEEL AND IRON.—Scully Steel and Iron Co., Chicago, Ill. Paper; 4½ × 7 ins.; pp. 144; illustrated.

This stock list announces a large variety of tools, machines, structural shapes, boiler tubes, etc. Over 40 pages of useful data are appended.

STEEL OFFICE EQUIPMENT.—Berger Mfg. Co., Canton, O. Paper; 6 × 9 ins.; pp. 72; illustrated.

A catalog of filing devices and office furniture, from safe-deposit box to waste-paper basket, entirely composed of steel. The unit combination system for convenience in assembling is adhered to.

SIDE DUMP CARS.—The Atlas Car & Manufacturing Co., Cleveland, Ohio. Bulletin No. 1065. Paper; 9½ × 6 ins.; pp. 20; illustrated.

Either side rock dumping cars, simple or with improvements and attachments, such as self-oiling wheels, motors, scales, etc., are described and listed in this bulletin.

WATERPROOFING FOR RESERVOIRS.—American Asphaltum & Rubber Co., 219 Woman's Temple, Chicago. Paper; 9 × 12 ins.; pp. 8; illustrated.

This illustrates and briefly describes the use of the company's asphalt in waterproofing four reservoirs of 500,000 to 5,000,000 gals. capacity in Kansas and Oklahoma.

WHEELBARROWS FOR THE CONTRACTOR.—Lansing Wheelbarrow Co., Lansing, Mich. Paper folder; 3½ × 6 ins.; pp. 18; illustrated.

Special barrows have been designed by this company for the varied needs of the contractor who works in brick, stone, mortar and cement.

TURRET LATHES AND BORING MILLS.—Gisholt Machine Co., Madison, Wis. Paper; 8 × 9¾ ins.; pp. 6; illustrated.

A short description is given of standard lathes and vertical boring mills designed to withstand the heaviest strains attending the use of high-speed steels. The catalog is accompanied by an attractive binder for this and future publications of the company.

STEAM HEATING VACUUM PUMPS.—Blake & Knowles Steam Pump Works, 115 Broadway, New York City. Bulletin BK-810. Paper folder; 6 × 9 ins.; pp. 4; illustrated.

The bulletin shows patterns of vacuum and feed pumps for service in connection with steam heating systems, refineries, dye and chemical works and surface and keel condensers.

CLEANING WATER MAINS.—National Water Main Cleaning Co., 27 William St., New York, N. Y. Paper; 5 × 8¼ ins.; pp. 24; illustrated.

The advantages of cleaning water mains from tuberculation are in maintaining sufficient capacity, and several letters are given testifying to the results of the company's work in different cities. Prices are given also.

ELEVATING, CONVEYING AND POWER TRANSMITTING MACHINERY.—The Link Chain Belt Co., 52 Dey St., New York City. General Catalog No. 20; paper; 6 × 9 ins.; pp. 208; illustrated.

The company has issued a new catalog of its very complete line of chains, shafts, ropes, and conveyors for both light and heavy work, with their accessories. Engines, crushers, screens and dump cars are also listed, accompanied by numerous photographs of the machinery in actual use, special attention being called to the link chain belt on a 90-ft. steel conveyor working under the severe conditions of the North River Tunnel at New York City.

THE NECESSITY OF EXPERT ADVICE.—American Engineering Co., Indianapolis, Ind. Paper; 4 × 9¼ ins.; pp. 16.

Under the title "49 Reasons Why," this firm of civil, electrical and mechanical engineers reprints that portion of the Interurban Railway Journal convention number, which enumerates the causes leading to the financial failure of "49 out of every 50 projected railways," prominence being given to the frequent lack of good engineering advice.

COATINGS AND DIPS.—Standard Asphalt & Rubber Co., First National Bank Building, Chicago. Paper; 6¼ × 3½ ins.; pp. 28.

This is a list of preservative coatings and dips for bridge and structural steel work, tanks, roofs, pipe, and general iron work; also for belting, canvas, wooden structures, etc. Paving asphalts and fillers, waterproofing for concrete work, and insulating coatings, are also listed.

CORLISS ENGINE PARTS.—Minneapolis Steel & Machinery Co., Minneapolis, Minn. Paper; 6¼ × 9¼ ins.; pp. 25; illustrated.

"The Engineer's Twin City Corliss Book" is a pamphlet issued for the benefit of users of the "Twin City" Corliss engine. All parts of the machine are herein illustrated, numbered and named, which will greatly facilitate the ordering of duplicate parts. Directions for valve setting and other useful data are appended.

AIR WASHERS, HUMIDIFIERS AND TEMPERATURE REGULATORS.—Carrier Air Conditioning Co. of America, Taylor Building, New York City. Paper; 6 × 9 ins.; illustrated.

This company has purchased from the Buffalo Forge Co. all rights to that firm's apparatus for bringing the air of public and private buildings to desired degree of heat and moisture. Reasons for the necessity of such regulation, especially in halls and industrial and commercial establishments are advanced, and improved methods of attaining this object are fully described and illustrated.

SMALL ELECTRIC MOTORS.—The Emerson Electric Mfg. Co., St. Louis, U. S. A. Bulletins; paper; 7 × 10 ins.; pp. 4 and 8; illustrated.

Bulletins Nos 3124 to 3126 relate to single-phase induction motors of ⅛ to ½-HP., with automatic start for full or light load. No. 3212 relates to bipolar direct-current enclosed motors of ¼ to ½-HP. No. 3803 shows motor driven air pumps for laboratory work, etc., the motors varying from 1/20 to ¼-HP. No. 3905 shows factory sewing machines operated by individual motors of 1/6 HP. (with transmitters) for direct current and alternating current.

DISPOSAL OF EXCAVATED MATERIAL.—George W. Jackson, Inc., Chicago. Paper; 8 × 11 ins.; pp. 36; illustrated.

This pamphlet explains the advantages of the network of tunnels under the streets of Chicago for transporting excavated material, the debris from wrecked buildings, etc., to a disposal station on the Chicago River. Self-propelling steel scows of 1,000 cu. yds. capacity carry the material from this station to a dumping ground in the lake. At building sites, vertical or inclined shafts may be sunk and the material delivered directly into cars in the tunnels. This disposal system is also used for ashes from the power plants of large buildings. A map of the tunnel system is given, and there are several views of the tunnels and their connections.

THE KENTENIA CORPORATION.—Supplement to the "Harlan Enterprise"; 22 × 16 ins.; pp. 42.

Mr. Chas. H. Davis, of New York City, who was prominent in engineering practice as a consulting and constructing engineer from 1888 to 1901, withdrew from professional work in the latter year to devote his time chiefly to the development of extensive coal lands in the South. He has recently organized a $10,000,000 corporation to control and develop over 100,000 acres of coal lands in Harlan and Bell counties, Ky. Associated with Mr. Davis in the enterprise is Mr. Warren Delano, Jr., M. Am. Inst. M. E. The large and finely illustrated publication describing this corporation is not issued for stock jobbing purposes (as those who know Mr. Davis will not need to be assured); the securities of the company are issued only to landholders in the region where the company is to operate. Many of Mr. Davis' former associates in engineering practice will be interested to learn of his present work and of the unique plans which he has adopted to carry out a difficult task of industrial development.

**For other Proposal Advertisements see pages 43, 44, 45, 46, 50, of Advertisements and Construction News page 188.**


### STONE ROAD.

Sealed proposals to build the Stone Road extending from a point where the center of the road from Eatontown to Tinton Falls intersects the west side of the stone road from Eatontown to Red Bank, thence westwardly along said road to Tinton Falls and through the town of Tinton Falls to the east end of Section No. 1 of the Eatontown and Colts Neck stone road in the County of Monmouth, N. J., a distance of 17,497 feet in length, will be received by the Board of Chosen Freeholders of the County of Monmouth at the Court House, Freehold, N. J., on Tuesday, the 16th day of June (next), 1908, at 11 o'clock in the forenoon, and then and there publicly opened.

Specifications and all information relating to said construction may be had by applying to E. Everett Throckmorton, Engineer, at his office at Long Branch, N. J., or at the Freeholders' office in the Court House, Freehold, N. J., or of George W. Patterson, Jr., Clerk of the Board of Freeholders, Ardena, N. J. (P. O. Freehold, N. J., R. F. D. No. 2.)

Each bidder must accompany his proposal with a certified check for One Thousand Dollars, payable to the Director of the Board of Chosen Freeholders as a guarantee if said work is awarded to him he will enter into a contract with said Board for the due and faithful performance of the work, which contract must be executed together with the bond of the successful bidder within the term of twenty days from the time of awarding the contract in the penal sum of at least the total estimated cost of the work with two or more Freeholders or a good and sufficient surety or trust company as sureties, all to be first duly approved by the Director of the Board of Chosen Freeholders and the State Commissioner of Public Roads and conditioned for the faithful performance of the work in strict conformity with the plans and specifications.

The Board reserves the right to reject any or all bids.

WM. B. CONOVER,
Director.

Attest:
GEO. W. PATTERSON, JR.,
Clerk.

Dated May 26, 1908. 22-3t

## FOR SALE

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12—3-yd. two-way Western Dump Cars, 36" gage.
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13-ton 9 × 14" Vulcan; steam brakes. Built 1902.
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All these locomotives 36" gage.

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20—4-yd. 2-way Diamond Frame Western—36".
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7—6-yd. 2-way Diamond Frame K. & J.—4' 8½".

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